



6523.0 - Household Income and Income Distribution, Australia, 2011-12

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Summary

Main Features

NOTES

ABOUT THIS PUBLICATION

This publication presents estimates of the income and other characteristics of households and persons resident in private dwellings in Australia, compiled from the 2011-12 Survey of Income and Housing (SIH). It includes estimates of the distribution of income across the population.

CHANGES IN THIS ISSUE

Key changes to the 2011-12 SIH include:

- a decrease in fully responding sample size from 18,071 households in 2009-10 to 14,569 households in 2011-12. The expansion in the 2009-10 sample for an extra 4,200 households outside capital cities to support housing indicator reporting was maintained. The additional sample of metropolitan households whose main source of income was a government pension, benefit and/or allowance included in the 2009-10 SIH and HES samples to improve analysis for the Pensioner and Beneficiary Living Cost Index was not maintained
- an additional benchmark for the value of government benefit cash transfers used in 2009-10 was not required in 2011-12
- disability questions for persons aged 15 years and over were not asked in 2011-12, but will be collected in 2013-14
- Child Care Rebate (CCR) and Child Care Benefit (CCB) have been modelled to improve estimates of both the payment amounts and the number of households receiving assistance
- selected social transfers in kind variables have been modelled in 2011-12, and analysis included in Appendix 4 of this publication
- a feature article on Low Economic Resource households is included in this publication.

REVISIONS

Errors in processing the 2009-10 income data have been corrected, resulting in an average decrease of \$1 for mean equivalised disposable household income across all households. This was reflected largely in a decrease of 0.04% in the mean equivalised disposable household income of households in the second and third deciles. The income estimates for 2009-10 shown in this publication have been revised. The second edition of the 2009-10 CURF includes the revised estimates.

REVISIONS IN THIS ISSUE

This release incorporates amendments to the rows presenting median gross household income in tables 7 to 17.

EFFECTS OF ROUNDING

Where figures have been rounded, discrepancies may occur between sums of the component items and

totals. Published percentages are calculated prior to rounding of the figures and therefore some discrepancy may exist between these percentages and those that could be calculated from the rounded figures.

INQUIRIES

For further information about these and related statistics, contact the National Information and Referral Service on 1300 135 070 or Living Conditions on Canberra (02) 6252 6174, email <living.conditions@abs.gov.au>.

Summary of Findings

SUMMARY OF FINDINGS

INTRODUCTION

The economic wellbeing of individuals is largely determined by their command over economic resources. Income and wealth are the economic resources that households use to support their consumption of goods and services. This publication provides indicators of the level and distribution of after tax (disposable) household income, after adjusting for household size and composition.

The estimates of disposable income in this publication are derived by deducting estimates of income tax liability, the Medicare levy and Medicare levy surcharge from the gross income data collected in the Survey of Income and Housing (SIH). Gross income is defined as income available for, or intended to support, current consumption, and are collected in respect of employment income (including non-cash benefits, bonuses, termination payments and irregular overtime), profit/loss from own unincorporated business, investment income (including interest, rent and dividends), lump sum workers' compensation receipts, private transfers (including superannuation, child support), other transfers from other households and cash transfers from government pensions and allowances. Some limits have been placed on items included as income, where the magnitude of individual amounts received exceeds that likely to be used to support current consumption (e.g. termination payments, workers compensation payments).

While income is usually received by individuals, it is normally shared between partners in a couple relationship and with dependent children. To a lesser degree, there may be sharing with other members of the household. Even when there is no transfer of income between members of a household, nor provision of free or cheap accommodation, household members are still likely to benefit from the economies of scale that arise from the sharing of dwellings. The income measures shown in this publication therefore relate to household income.

Larger households normally require a greater level of income to maintain the same material standard of living as smaller households, and the needs of adults are normally greater than the needs of children. The income estimates are therefore adjusted by equivalence factors to standardise the income estimates with respect to household size and composition, while taking into account the economies of scale that arise from the sharing of dwellings. The equivalised disposable income estimate for any household in this publication is expressed as the amount of disposable cash income that a single person household would require to maintain the same standard of living as the household in question, regardless of the size or composition of the latter.

Appendix 3 provides a more detailed explanation of equivalised disposable household income. It shows the differences in income measures when calculated from data at different stages in progression from gross household income, through disposable household income, to person weighted equivalised disposable household income.

The ABS has revised its standards for household income statistics following the adoption of new international standards in 2004 and review of aspects of the collection and dissemination of income data. These new standards were introduced for the first time in the 2007-08 reference period. Income estimates presented in this publication from 2007-08 onwards apply the new income standards.

KEY RESULTS

Some of the key income results from the 2011-12 SIH are:

- in real terms, average weekly equivalised disposable household income for low income households rose by 5% (from \$452 to \$475) between 2009-10 and 2011-12, and those for middle income households rose by 4% (from \$760 to \$793) (Table 1)
- there were no significant changes in income between 2009-10 and 2011-12 for high income households (from \$1,797 to \$1,814), or for all households in total (from \$894 to \$918) (Table 1)
- the share of total household income received by low and middle income households increased between 2007-08 and 2011-12, while the share received by high income households decreased (Table 1)
- for households with middle and high income levels, wages and salaries were the main source of income for 79% and 88% of households respectively, while for low income households (i.e. those people with household income in the second and third deciles) government pensions and allowances were the main income source for more than 60% of households (Table 6)
- people living in older households (households where the reference person was aged 65 and over) had the lowest average weekly equivalised disposable household income at \$660, and those living alone were more likely than those living in couple households to have government pensions and allowances as their main source of income (76% compared to 61%) (Tables 13 and 14)
- couples with dependent children only, where the oldest child was under five, had an average weekly equivalised disposable household income of \$960 (29% lower than for young couples without children) (Table 13)
- average equivalised disposable household incomes in the capital cities in Australia were 21% above those outside the capital cities (Tables 15 and 16)
- average equivalised disposable household incomes in the Australian Capital Territory (\$1,144), Western Australia (\$1,017), and the not very remote parts of the Northern Territory (\$1,012) were above the national average (\$918) (Table 17)
- average equivalised disposable household incomes in Tasmania, South Australia and Victoria were below the national average by 15%, 8% and 4% respectively (Table 17).

Some of the key net worth results from the 2011-12 SIH are:

- the wealthiest 20% of households in Australia account for 61% of total household net worth, with an average net worth of \$2.2 million per household (Table 7)
- the poorest 20% of households account for 1% of total household net worth, with an average net worth of \$31,205 per household (Table 7)
- the households in which the 20% of people with the lowest equivalised household incomes live, account for 15% of total household net worth, similar to the shares of net worth held by the households with people in the second and third equivalised household income quintiles (Table 6)
- the households in which the 20% of people with the highest equivalised household incomes live account for 37% of total household net worth (Table 6).

HOUSEHOLD INCOME

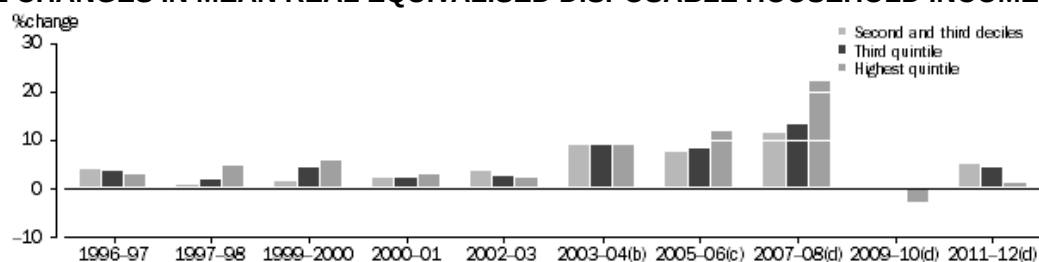
Average (mean) equivalised disposable household income is the income that a single person household would require to maintain the same standard of living as the average person living in all private dwellings in Australia. In 2011-12, the average (mean) equivalised disposable income for all persons living in private dwellings was \$918 per week (Table 1). There were approximately 22.2 million people living in private dwellings (Table 2).

In real terms, average equivalised disposable household income did not show any significant change between 2009-10 (\$894) and 2011-12 (\$918). In 2007-08 there was a break in series due to the improvements in measuring income introduced in that cycle. Adjusting for the break in series the net increase between 1994-95 and 2011-12 was 49%.

In real terms, average equivalised disposable household income increased from 2009-10 to 2011-12 by 5% (\$23 per week) for low income households and by 4% (\$33 per week) for middle income households. There was no significant change in average equivalised disposable household income for high income

households.

S1 CHANGES IN MEAN REAL EQUIVALISED DISPOSABLE HOUSEHOLD INCOME (a)



(a) Change from previous survey

(b) The 2003-04 data have been recomputed to reflect new treatments of income where data available to support this calculation

(c) The 2005-06 data have been recomputed to reflect new treatments of income where data available to support this calculation

(d) Estimates presented for 2007-08 onwards are not directly comparable with estimates for previous cycles due to the improvements made to measuring income introduced in the 2007-08 cycle. Estimates for 2003-04 and 2005-06 have been recomputed to reflect the new treatments of income, however not all new components introduced in 2007-08 are available for earlier cycles

Household characteristics

Households with different characteristics tend to have different income levels, as shown in Table 6, and summarised in the following table. Wages and salaries were the main source of income (MSI) for 79% and 88% of households with middle and high income levels respectively in 2011-12 while government pensions and allowances dominated for low income households. However, low income households had the highest incidence of full ownership of their home, reflecting the high proportion of older people in the low income category.

S2. HOUSEHOLD CHARACTERISTICS 2011-12, by income group

		Low income(a)	Middle income(b)	High income(c)
Mean equivalised disposable household income per week	\$	475	793	1 814
Has MSI of wages and salaries(d)	%	26.3	79.1	88.4
Has MSI of government pensions and allowances(d)	%	62.7	3.9	-
Owns home without a mortgage	%	43.0	26.4	22.9
Owns home with a mortgage	%	20.3	41.3	52.6
Rents from state/territory housing authority	%	6.8	0.9	*0.2
Rents from private landlord	%	25.1	28.4	22.1
Average number of persons in household	no.	2.4	2.9	2.5
Average number of employed persons in the household	no.	0.6	1.6	1.9

* estimate has a relative standard error of 25% to 50% and should be used with caution

- nil or rounded to zero (including null cells)

(a) Persons in the second and third income deciles

(b) Persons in the middle income quintile

(c) Person in the highest income quintile

(d) Main source of income (MSI)

Middle income households contained more people on average than high income households (2.9 compared to 2.5) but contained fewer employed persons (1.6 compared to 1.9). In part, this reflects the different age profiles of the two groups. Table 6 shows that middle income households had an average of 0.8 persons under the age of 18 and 0.3 aged 65 and over, compared to 0.4 and 0.1 respectively for high income households. Low income households had an average of 0.6 employed persons, and housed an average of 2.4 persons. Of these, on average 0.6 were under 18 years, 1.1 were 18 to 64 years, and 0.7 were aged 65 years and over.

The characteristics of Australian households are changing over time. Table 3 shows that the average number of persons per household declined from 2.69 to 2.57, or about 4% between 1994-95 and 2011-12. While the relative proportion of one family, multiple family and non-family households has not changed since 1994-95, there have been changes in types of one family households. In particular, the proportion of couple family with dependent children households has fallen from 30.5% to 26.2% and the proportion of couple only households has risen from 23.7% to 25.8%. Each main source of income retained its relative importance between 1994-95 and 2011-12 with 61.1% of households primarily dependent on wages and salaries in 2011-12. The proportion of households reliant on government pensions and allowances was 24.8% in 2011-12 down from 28.5% in 1994-95. There has been no change in the proportion of households

with each main source of income since 2009-10. Since 1994-95, home ownership has ranged from 71% in 1994-95 to 67% in 2011-12.

Life cycle stages

Income levels across the population partly reflect the different life cycle stages that people have reached. A typical life cycle includes childhood, early adulthood, and the forming and maturing of families, as illustrated in Table 13. Other family situations and household compositions are shown in Table 12. The following table compares households in different life cycle groups.

S3. Income and household characteristics for selected life cycle groups, 2011-12

	Number of households	Average number of persons	Average number of employed persons	Average number of dependent children	Proportion with government pensions and allowances as MSI(a)	Mean equivalised household income per week	Proportion owning home without a mortgage
	'000	no.	no.	no.	%	\$	%
Lone person aged under 35	300.6	1.0	0.8	-	11.2	895	*2.4
Couple only, reference person aged under 35	470.4	2.0	1.8	-	*2.2	1 352	*1.1
Couple with dependent children only							
Eldest child under 5	482.2	3.4	1.5	1.4	5.9	960	3.7
Eldest child 5 to 14	859.8	4.2	1.6	2.2	8.7	919	9.4
Eldest child 15 to 24	546.7	4.1	2.3	2.1	8.3	873	23.2
Couple with Dependent and non-dependent children only	272.5	4.7	3.0	1.5	*5.2	956	23.9
Non-dependent children only	504.8	3.3	2.3	-	11.2	1 085	44.5
Couple only, reference person aged 55 to 64	518.2	2.0	1.2	-	14.9	1 044	55.1
Couple only, reference person aged 65 and over	796.0	2.0	0.2	-	60.7	656	82.1
Lone person aged 65 and over	801.5	1.0	0.1	-	76.1	526	71.9
One parent, one family household with dependent children	503.9	3.1	0.9	1.7	44.1	618	7.3

* estimate has a relative standard error of 25% to 50% and should be used with caution

- nil or rounded to zero (including null cells)

(a) Main source of income (MSI)

Younger couples without children had the highest mean equivalised disposable household income of \$1,352 per week (Table 13), with an average of 1.8 employed persons in the household. For couples with dependent children only, and with the eldest child being under five, mean equivalised disposable household income was \$960 per week (29% lower than for the young couples without children). This lower income principally reflects the lower average number of employed persons in these households (1.5) and the larger average number of persons in these households (3.4) over which incomes are shared.

Average incomes were higher for households with non-dependent children, reflecting higher proportions of employed persons in these households, but were lower for households comprising older couples and lone persons, where the numbers of employed persons were substantially lower.

People living in households where the reference person was aged 65 and over had the lowest mean incomes, with lone persons' incomes at \$526 (Table 13) per week. This was lower than for older couple only

households where the reference person was aged 65 and over and the mean income was \$656 per week. Older lone persons were more likely than older couples to have government pensions and allowances as their main source of income (76% compared to 61%), while older couples were more likely to fully own their home (82% compared to 72%).

Households comprising one parent with dependent children had a mean income of \$618 per week (Table 12). Only 7% fully owned their home and therefore a substantially greater proportion were making mortgage or rental payments from their income. Of these households, 44% had government pensions and allowances as their main source of income. On average there were 0.9 employed persons in the household.

States and territories

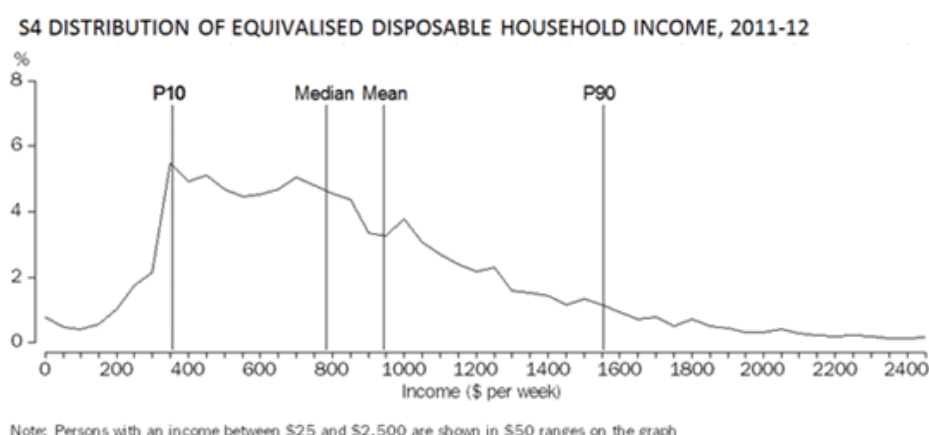
There were differences in the average levels of income between the states and territories (see Table 17). Tasmania, South Australia and Victoria had mean equivalised disposable household incomes below the national average (15%, 8% and 4% below the national average respectively). The Australian Capital Territory, Western Australia and the Northern Territory are shown to have the highest mean incomes (25%, 11% and 10% above the national average respectively). The high income levels reflect in part the younger age profile of the ACT and NT and the greater number of employed persons per household. The results for the Northern Territory also reflect the exclusion of households in very remote areas of the NT, which would be likely to reduce the mean income in that territory if included. This potential for an overestimated mean income in the NT is based on the large relative size of the very remote population for that territory.

New South Wales, with the largest state population, recorded a mean equivalised disposable household weekly income only 2% above the national average, which is not a statistically significant difference (Table 17).

There are also differences between the equivalised disposable household incomes recorded in capital cities compared to those earned elsewhere in Australia. At the national level, mean incomes in the capital cities were 21% above those in the balance of state (Tables 15 and 16), with all states (separate information is not available for the ACT and NT) recording capital city mean incomes above those in the balance of state. The largest differences recorded were for New South Wales and Victoria where the capital city incomes were 26% and 25% respectively, above the mean incomes across the rest of the state.

INCOME DISTRIBUTION

While the mean equivalised disposable household income of all households in Australia in 2011-12 was \$918 per week, the median (i.e. the midpoint when all people are ranked in ascending order of income) was somewhat lower at \$790 (shown as P50 in Table 1). This difference reflects the typically asymmetric distribution of income where a relatively small number of people have relatively very high household incomes, and a large number of people have relatively lower household incomes, as illustrated in the following frequency distribution graph.



Percentile ratios are one measure of the spread of incomes across the population. P90 (i.e. the income level dividing the bottom 90% of the population from the top 10%) and P10 (i.e. dividing the bottom 10% of the population from the rest) are shown on the above graph. In 2011-12 P90 was \$1,555 per week and P10 was \$379 per week, giving a P90/P10 ratio of 4.10. Changes in these ratios can provide a picture of changing income distribution over time (Table 1).

Another measure of income distribution is provided by the income shares going to groups of people at different points in the income distribution. The following table (S5) shows that, in 2011-12, 10.4% of total equivalised disposable household income went to people in the 'low income' group (i.e. those people with household income in the second and third deciles) with 39.5% going to the 'high income' group (i.e. the 20% of the population in the highest income quintile) (Table 1).

The Gini coefficient is a single statistic that lies between 0 and 1 and is a summary indicator of the degree of inequality, with values closer to 0 representing a lesser degree of inequality, and values closer to 1 representing greater inequality. For 2011-12 the Gini coefficient was 0.320.

Some of the change in the income distribution measures between 2005-06 and 2007-08 reflects the most recent improvements made in the 2007-08 cycle. The estimates presented in Tables 1-3 for 2003-04 and 2005-06 have been revised to be as comparable as possible with estimates from 2007-08 onwards.

For more information on analysing income distribution please refer to Appendix 1.

S5. SELECTED INCOME DISTRIBUTION INDICATORS, Equivalised disposable household income

		1994-95	1995-96	1996-97	1997-98	1999-2000	2000-01	2002-03	2003-04(a)	2005-06(a)	2007-08(a)	2009-10(a)	2011-12(a)
Percentage share of total income received by persons with													
Low income(b) %		10.8	11.0	11.0	10.8	10.5	10.5	10.6	10.6	10.4	10.0	10.1	10.4
Middle income(c) %		17.7	17.7	17.8	17.7	17.7	17.6	17.6	17.6	17.4	16.9	17.0	17.3
High income(d) %		37.8	37.3	37.1	37.9	38.4	38.5	38.3	38.4	39.2	41.0	40.2	39.5
Ratio of incomes at top of selected income percentiles													
P90/P10 ratio		3.78	3.74	3.66	3.77	3.89	3.97	4.00	3.87	4.05	4.35	4.24	4.10
P80/P20 ratio		2.56	2.58	2.54	2.56	2.64	2.63	2.63	2.55	2.58	2.66	2.70	2.61
P80/P50 ratio		1.55	1.57	1.56	1.56	1.57	1.56	1.57	1.53	1.55	1.58	1.60	1.56
P20/P50 ratio		0.61	0.61	0.61	0.61	0.59	0.59	0.60	0.60	0.60	0.59	0.59	0.60
Gini coefficient	no.	0.302	0.296	0.292	0.303	0.310	0.311	0.309	0.306	0.314	0.336	0.329	0.320

(a) Estimates presented for 2007-08 onwards are not directly comparable with estimates from previous cycles due to improvements made to measuring income introduced in the 2007-08 cycle. Estimates for 2003-04 and 2005-06 have been recompiled to reflect the new treatments of income, however not all new components introduced in 2007-08 are available for earlier cycles

(b) Persons in the second and third income deciles

(c) Persons in the middle income quintile

(d) Persons in the top income quintile

IMPUTED RENT

The addition of net imputed rent allows for more meaningful comparison of the income circumstances of people living in different tenure types. Including imputed rent as part of household income and expenditure conceptually treats owner-occupiers as if they were renting their home from themselves, thus simultaneously incurring rental expenditure and earning rental income. Imputed rent is included in income on a net basis i.e. the imputed value of the services received less the value of the housing costs incurred by the household in their role as landlord.

Table 18 presents the estimates of gross and net imputed rent for owner-occupied dwellings and other housing tenures where a rent imputation has been made for 2005-06, 2007-08, 2009-10 and 2011-12. The effect of adding net imputed rent to disposable household income is also shown (on an equivalised basis). The estimated mean gross imputed rent for owner-occupiers was higher than the mean imputation for

subsidised renters or other tenure types. When housing costs were subtracted from gross imputed rent to derive net imputed rent, households who occupied their dwelling rent-free (2% of all private households) had the highest mean net imputed rent. Owners without a mortgage, who account for about a third of all private households, had the next highest mean net imputed rent.

In 2011-12 the addition of net imputed rent to disposable household income contributed, on average, an extra \$55 (6%) to the income of all households. The effect in 2005-06, 2007-08 and 2009-10 was similar. For some housing tenures the addition of net imputed rent to disposable household income saw a significant increase in their mean equivalised disposable household incomes. The largest effect for homeowners was seen for households who occupied their dwelling as owners without a mortgage (20% increase in 2011-12). Consistent with previous years, there was also a significant increase in 2011-12 for tenants of state/territory housing authorities (17%). The overall effect of the addition of net imputed rent to disposable income is a reduction in the mean income disparities between housing tenures, with a significant decline in the ratio between tenures with the highest and lowest incomes. For example, in 2011-12 the ratio of the mean income of owners with a mortgage to the mean income of tenants of state/territory housing authorities declined from 2.2 to 1.9 when net imputed rent was included.

Impact on Income Distribution

The addition of net imputed rent to disposable household income has a partial equalising effect on the distribution of household income. This reflects that, for many home owners in lower income ranges the family home is the largest asset held by the household, and the net imputed rent income from that asset is a relatively large proportion of the household's incomes. In higher income ranges the net imputed rent income is a relatively smaller proportion of the household's incomes. This equalising effect of accounting for net imputed rent in income analysis is illustrated in the following frequency distribution graph, table and discussion of a range of distribution measures.

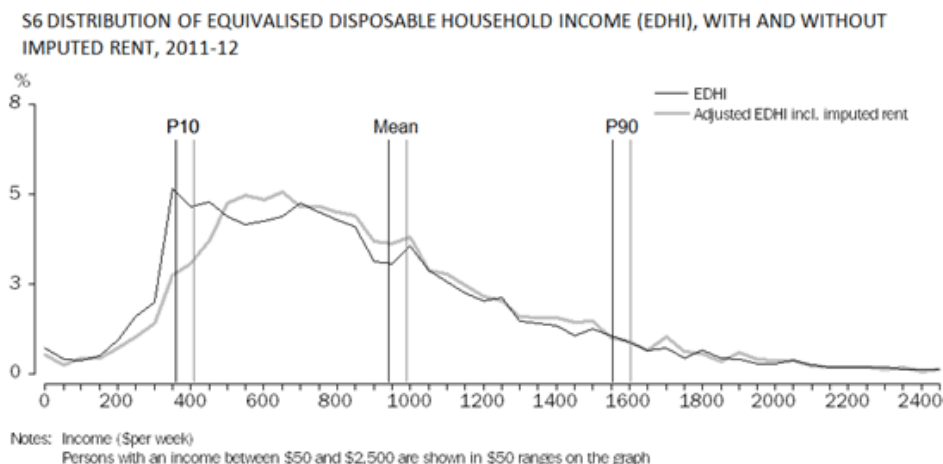


Table 19 shows that in 2011-12 P90 for equivalised disposable household income was \$1,555 per week and P10 was \$379 per week, giving a P90/P10 ratio of 4.10. When net imputed rent was added to income the P90/P10 ratio fell to 3.61. The addition of net imputed rent saw a decrease in the Gini coefficient from 0.320 to 0.301, a decrease of 5.9%. This further indicates that the inclusion of net imputed rent to income results in a more equal distribution.

WEALTH DISTRIBUTION

The distribution of net worth across households is much more unequal than for income, partly reflecting the common pattern of people gradually accumulating wealth throughout their working life. In 2011-12 the 20% of households with the lowest net worth accounted for only 1% of total household net worth, with an average net worth of \$31,205 per household (Table 7). The wealthiest 20% of households in Australia account for 61% of total household net worth, with an average net worth of \$2.2 million per household.

The picture of wealth is more equally distributed when viewed from the perspective of the distribution of incomes. The households in which the 20% of people with the lowest equivalised household incomes live account for 15% of total household net worth, similar to the shares of net worth held by the households with people in the second and third household income quintiles (14% and 15% respectively) (Table 6). The households in which the 20% of people with the highest equivalised household incomes live account for

37% of total household net worth (Table 6).

The distributional pattern of net worth is also marked when considered in terms of sources of household income and household tenure. Households where the main source of household income is 'other' income (principally investment income) had average household net worth of \$1.9 million, while for those where the main source of household income was government pensions and allowances the average household net worth was \$366,129 (Table 9). Net worth in renter households was on average only about 13% of the net worth in owner households with no mortgage, and about 20% of the net worth of owner households with a mortgage (Table 11).

CHILD CARE

In this publication, the child care use and cost estimates are based on data collected from child care questions being asked of households in the survey where children 12 years of age or less were resident. Table 8 provides key child care information by specific household characteristics. The payments for Child Care Benefit and Child Care Rebate have been modelled, and these payments, with other reported cost of care estimates, are also shown on a household basis.

In SIH 2011-12 respondents were asked to report child care use for the month prior to interview. On this basis, the proportion of children using care may be smaller than a measure based on a usual (or regular) attendance basis due to temporary absences, and larger than the proportion attending in a shorter reference period (such as a school term week). The largest difference will reflect the numbers of school children who will attend vacation care but no other formal care during a school term.

The number of households with children aged 0-12 years using only formal care in the month prior to interview was 264,800 (13% of households with children of this age).

For informal care, 647,900 households with children aged 0-12 years were using only this type of care in the month prior to interview (31% of households with children of this age). Of households with children aged 0-12 years, 422,700 (20%) used both formal and informal child care.

For households using only formal child care, the average weekly cost per household for formal child care before the Child Care Benefit or Child Care Rebate was deducted was \$162. For households using only formal child care, the average amount received per week for the Child Care Benefit and Child Care Rebate was \$53 and \$41 respectively.

Household Economic Wellbeing

HOUSEHOLD ECONOMIC WELLBEING FACT SHEETS

These fact sheets provide a broad overview of the key concepts and data sources for measuring household economic wellbeing. The Household Economic Wellbeing fact sheet series currently comprises:

- **Fact sheet 1.** What is household economic wellbeing?
- **Fact sheet 2.** Understanding measures of income and wealth
- **Fact sheet 3.** Low economic resource households
- **Fact sheet 4.** Key data sources
- **Fact sheet 5.** Changes over time

- **Key terms**
- **For more information**

The series may be expanded in the future to cover other aspects of these important statistics.

FACT SHEET 1. WHAT IS HOUSEHOLD ECONOMIC WELLBEING?

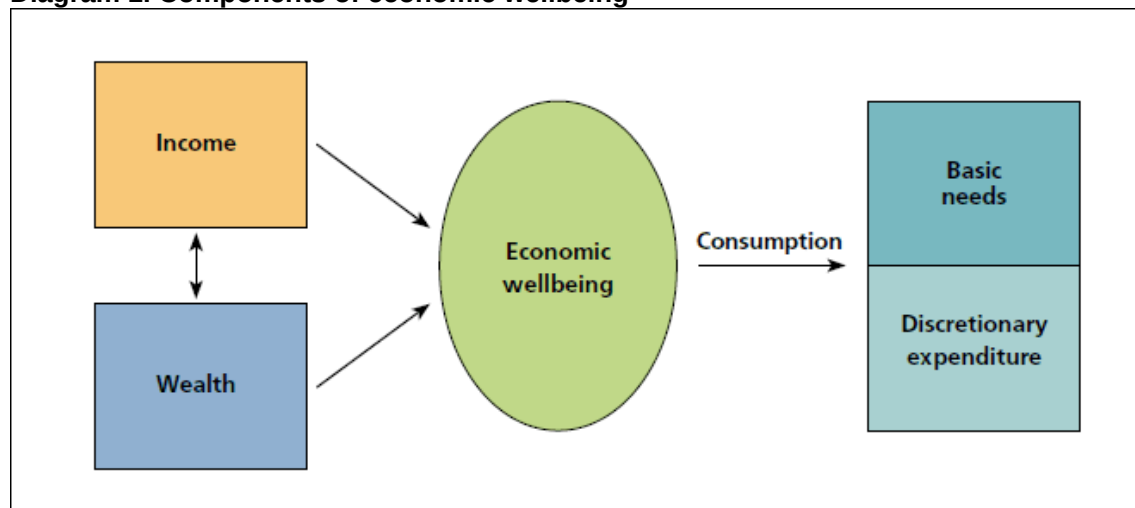
When considering the circumstances of households, the key economic wellbeing factors that affect people's material standard of living are income, consumption and wealth.

Income can be used to support consumption of goods and services, such as food, clothing, housing and leisure activities. Alternatively, it can be saved and invested to increase wealth which can be used at a later date to support consumption.

Some people with low incomes have considerable wealth allowing them to maintain consumption levels above their current income. People with low reserves of wealth may face financial difficulty in times of need, such as during any period of reduced income or substantial unexpected expenses.

Diagram 1 illustrates this relationship, although people's actual wellbeing is affected by individual circumstances and lifestyle choices.

Diagram 1. Components of economic wellbeing



Box 1. Key resources for statistics on household income, consumption and wealth

Canberra Group Handbook on Household Income Statistics, Second Edition, 2011

Reflects new international standards for household income statistics and provides guidance on conceptual and practical issues related to their production and use.

Available at <<http://www.unece.org/statshome/publications-amp-resources/publications.html>>

OECD Guidelines for Micro Statistics on Household Wealth

Provides an internationally agreed set of standard concepts, definitions and classifications for micro wealth statistics and best practice for compiling and analysing wealth statistics.

Available at <<http://www.oecd.org/statistics/guidelines-for-micro-statistics-on-household-wealth.htm>>

OECD Framework for Statistics on the Distribution of Household Income, Consumption and Wealth

Presents an internationally agreed framework to support the joint analysis of micro-level statistics on household income, consumption and wealth as three separate but interrelated dimensions of people's economic wellbeing.

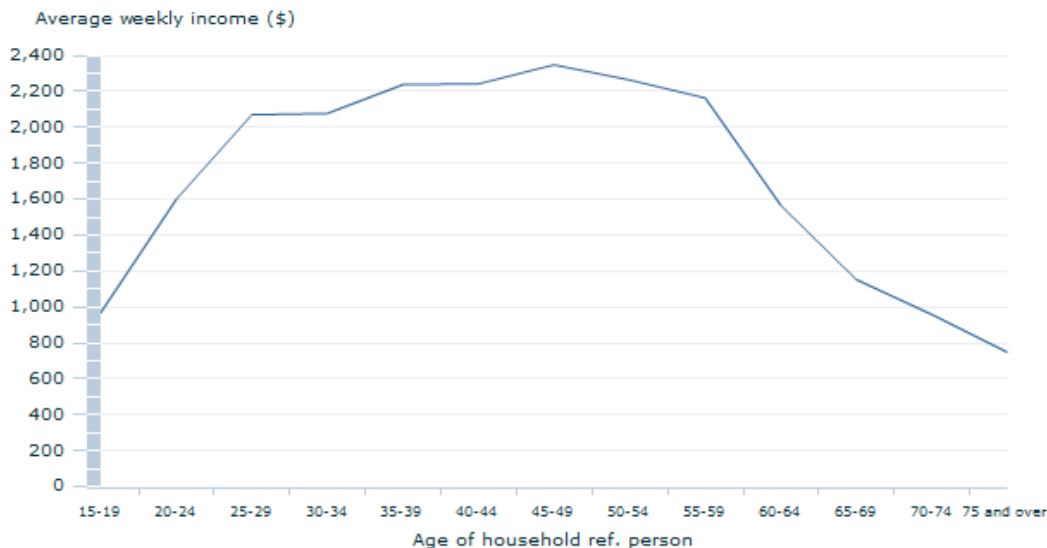
Available at <<http://www.oecd.org/statistics/icw-framework.htm>>

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Income and wealth accumulation over the life cycle

Income levels and wealth vary over a person's life and are affected by two main factors, age and labour force participation. Incomes tend to grow until middle age. Wealth tends to be gradually accumulated during the working lives of household members and used during retirement. (Graphs 1 and 2)

Graph 1. Gross household income by age of reference person, 2011-12



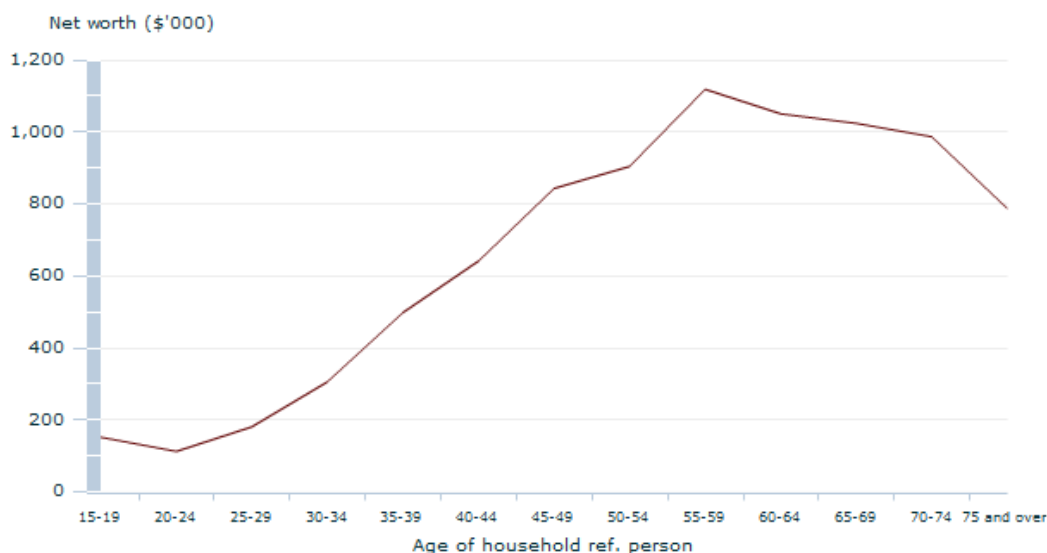
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Source(s): ABS Household Wealth and Wealth Distribution (6554.0)

Graph 2. Net worth by age of reference person, 2011-12



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Source(s): ABS Household Wealth and Wealth Distribution (6554.0)

Key concepts for measuring economic wellbeing

The definitions used to measure the economic wellbeing of people can have a significant impact on the results. The Australian Bureau of Statistics (ABS) follows international best practice in producing micro statistics relating to household economic resources.

Income

The most comprehensive measure of income is compiled from the ABS Survey of Income and Housing (SIH) and the ABS Household Expenditure Survey (HES). This definition aligns with new international standards released in 2004 and fully adopted from SIH 2007-08 and HES 2009-10:

Income consists of all current receipts, whether monetary or in kind, that are received by the household or by individual members of the household, and which are available for, or intended to support, current consumption.

Wealth

The first international wealth standards were published by the OECD in 2013.

Wealth refers to economic resources in the form of assets and liabilities. Wealth, or net worth, is the value of all the assets (e.g. property, bank accounts and shares) owned by a household less the value of all its liabilities (mortgages and other loans) at a particular point in time. Net worth may be negative when a household's liabilities exceed its assets.

Consumption expenditure

The international definition of consumption expenditure is summarised as:

Household consumption expenditure is the value of consumer goods and services acquired, used or paid for by a household through direct monetary purchases, own account production, barter or as income in kind.

In the HES, expenditure is valued as the cost of goods and services acquired during the reference period for private use, whether or not the goods were paid for or consumed in that period. Expenditure is net of refunds and trade-ins. Consumption expenditure includes in kind income from employers, such as subsidised housing or the use of a car for private purposes.

Broadening the income measure

In recent years the ABS has made significant progress in extending its measurement of household income to reflect real world changes and enhance analytical opportunities. This includes developing new measures to allow the full economic circumstances of different types of households to be compared. In particular, the ABS has produced:

- a) imputed rent (IR) estimates since 2003–04
- b) social transfers in kind (STIK) allocations from SIH 2011–12 (previously only based on HES data)
- c) final income estimates since 1984.

a) Imputed rent

What is it?

Income from imputed rent is allocated to owner occupiers and households living in subsidised private rentals e.g. renting from a family member. For owner occupiers, income from imputed rent is the estimated market rent of a dwelling less housing costs normally paid by a landlord such as mortgage interest, rates, insurance and repairs. For renters, it is the difference between market rent and actual rent paid.

Why include imputed rent in income?

Housing is one of the most significant living costs borne by many households. The inclusion of imputed rent in income provides a broader picture of the economic wellbeing of owner occupied and rent-subsidised households relative to other households, allowing more meaningful comparisons of the wellbeing of people living in different tenure types.

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b) Social transfers in kind

What are they?

Social transfers in kind are goods and services provided by governments that benefit individuals but are provided free or at subsidised prices. Examples include free or subsidised education, health and child care.

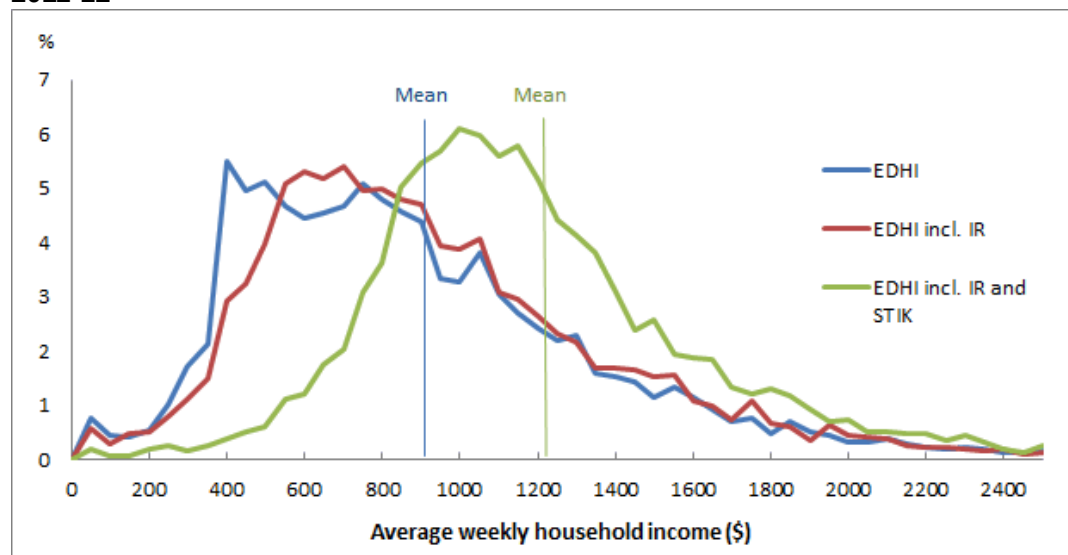
Why include STIK in income?

STIK have a significant impact on the wellbeing of people and on the measurement of the distribution of

income. This is important for comparisons within and across countries. In Australia, many government services have been designed to assist those most in need of financial support. The allocation of benefits differs between households, reflecting characteristics such as household composition, life cycle stages, household size and income.

The inclusion of IR and STIK increased the mean equivalised disposable household income (EDHI) from \$918 to \$1220 per week in 2011–12 and reduced the inequality of income distribution across households. (Graph 3)

Graph 3. Distribution of equivalised disposable household income with and without IR and STIK, 2011-12



Source: ABS Survey of Income and Housing (6523.0) Appendix 4 Social transfers in kind

c) Final income

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What is it?

Final income is equal to household private income plus social assistance benefits in cash (e.g. age and disability support pensions, Family Tax Benefit) and STIK less income taxes and taxes on production (e.g. GST and taxes on alcohol and cigarettes). Both household income and expenditure are required to estimate final income. This data is available whenever the HES is conducted, most recently in 2009–10. (Diagram 2)

Why is it important?

Final income shows the full effect of government expenditure and taxes on the distribution of income among private households in Australia. This allows policy makers to understand the effects of changes in either government revenues or spending that directly impact on the economic wellbeing of households.

The net effect of government benefits and taxes in 2009–10 was to increase average incomes of households in the three lowest quintiles and decrease those of the two highest quintiles. (Graph 4)

Graph 4. Private & final household income, by equivalised private household income quintile, 2009-10



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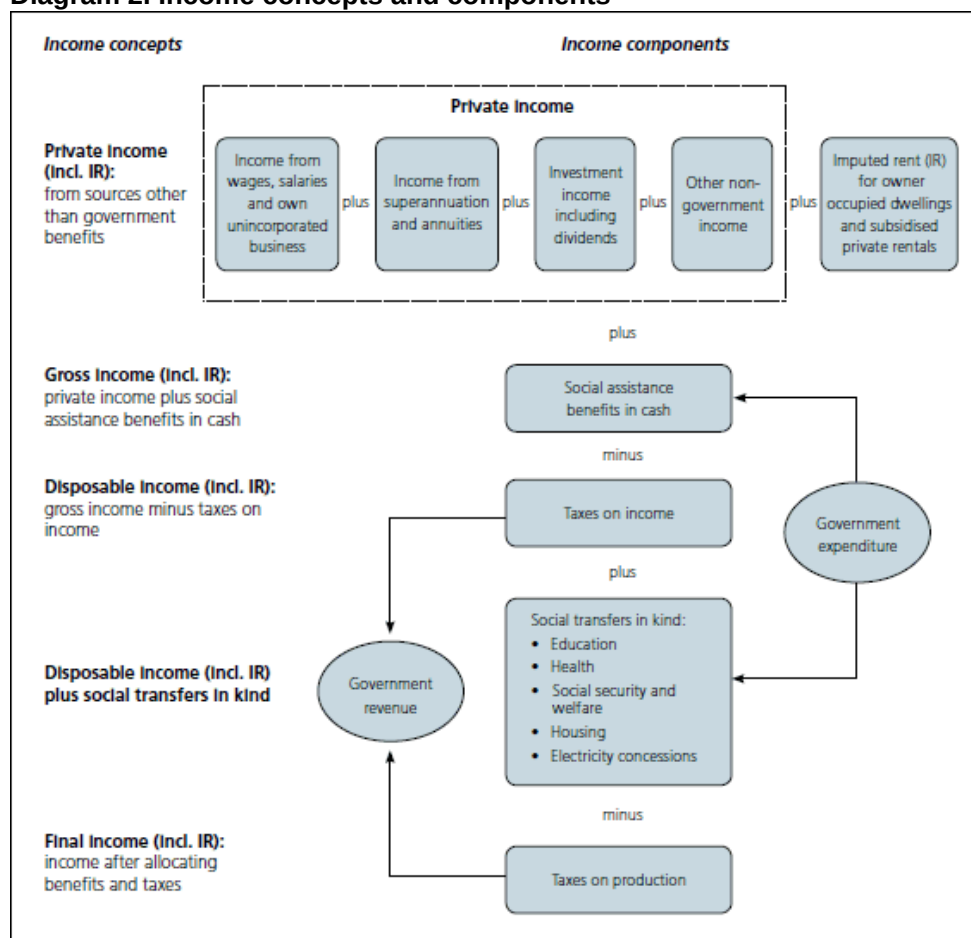
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Source(s): ABS Government Benefits, Taxes and Household Income (6537.0)

Diagram 2 illustrates the relationship between the different income concepts presented in this Fact Sheet Series.

Diagram 2. Income concepts and components



FACT SHEET 2. UNDERSTANDING MEASURES OF INCOME AND WEALTH

Why is income and wealth distribution important?

Economic and social analysts and policy makers are interested in the distribution of resources and how this affects the wellbeing of society and individuals, particularly people's ability to acquire the goods and services required to satisfy their needs.

Questions that researchers ask include:

- How unequal is the distribution of income and wealth? How does this compare with earlier years, or with other countries?
- What are the characteristics of households considered most at risk of economic hardship? Which are in greatest need of financial support?
- Do people have sufficient incomes and wealth accumulation in their working lives and to maintain an adequate standard of living in retirement?

Equivalence scales

Why is an equivalence scale used?

As household size increases, consumption needs also increase but there are economies of scale. An equivalence scale is used to adjust household incomes to take account of the economies that flow from sharing resources and enable more meaningful comparisons across different types of households. For a lone person household equivalised income is equal to actual income. For households comprising more than one person, it is the estimated income that a lone person household would need to enjoy the same standard of living as the household in question.

How are equivalising factors calculated?

Equivalising factors are calculated based on the size and composition of the household, recognising that children typically have fewer needs than adults. The ABS uses the *OECD-modified equivalence scale* which assigns a value of 1 to the household head, 0.5 to each additional person 15 years or older and 0.3 to each child under 15 years.

Table 1 shows that a couple household with one child would need \$1,800 weekly disposable income to have the same equivalised disposable household income (EDHI) as a lone person household with a disposable income of \$1,000.

Table 1. Examples of equivalised weekly disposable household income

<i>Household composition</i>	<i>Equivalising factor (x)</i>	<i>Disposable income (y)</i>	<i>Equivalised disposable income (y/x)</i>
	no.	\$	\$
Lone person	1.0	1,000	1,000
Couple only	$(1 + 0.5) = 1.5$	1,500	1,000
Couple with one child under 15 years	$(1 + 0.5 + 0.3) = 1.8$	1,800	1,000
Group household with three adults	$(1 + 0.5 + 0.5) = 2.0$	2,000	1,000

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Relationship between equivalisation of income, consumption and wealth

Equivalence scales used for household income are equally applicable for consumption measures. There is less agreement about how to equivalise household wealth as wealth is often built up during a person's working life and then used during retirement when the composition of the household might be quite different. However, when wealth is being used to support current consumption, particularly for households at risk of economic hardship, household wealth should be equivalised with the same scale used to equivalise household income and consumption.

Analysis of households and persons

There are two common ways of presenting analysis of households:

- number of households, or
- number of people in households.

In the former, each household contributes the same regardless of its size, e.g. a four person household would have the same representation as a person living alone.

To provide a better understanding of the circumstances of people it is often preferable to study people in households e.g. the number of people in Australian households experiencing economic hardship. In this analysis, each person is attributed with the characteristics of the household to which they belong, e.g. household income is used to determine whether it is a low or high income household but analysis is about numbers of people experiencing hardship. This approach keeps the focus on individual circumstances while recognising that people share household resources.

Summary measures

There are several summary measures commonly used for analysing household economic wellbeing.

Counts

Counts provide an estimate of the total number of people or households with a particular characteristic and are derived by summing the survey weights of each observation of interest. In sample surveys the weights enable extrapolation of the survey responses to official population estimates.

Means

The arithmetic mean, or average, is the sum of all income divided by the number of observations. Advantages of the mean are that it is easy to calculate and the means of all subcomponents sum to the mean of all observations. Its drawbacks are the effect of extreme values and asymmetry of the distribution, both of which are relevant for income and wealth data. For example, a small number of very wealthy and a large number of relatively poor households may have the same average income or wealth as a population where there is equal distribution of resources.

Medians

Medians are calculated by ranking all observations from the lowest to the highest. The middle observation of the distribution is the median. Compared to the mean, the median is a more stable measure and is less affected by extreme values and sample fluctuations. However, median values of subcomponents do not add up to the median of all observations.

Distribution measures

Measures of the distribution of income and wealth help to describe and understand how economic resources are shared across the population and households.

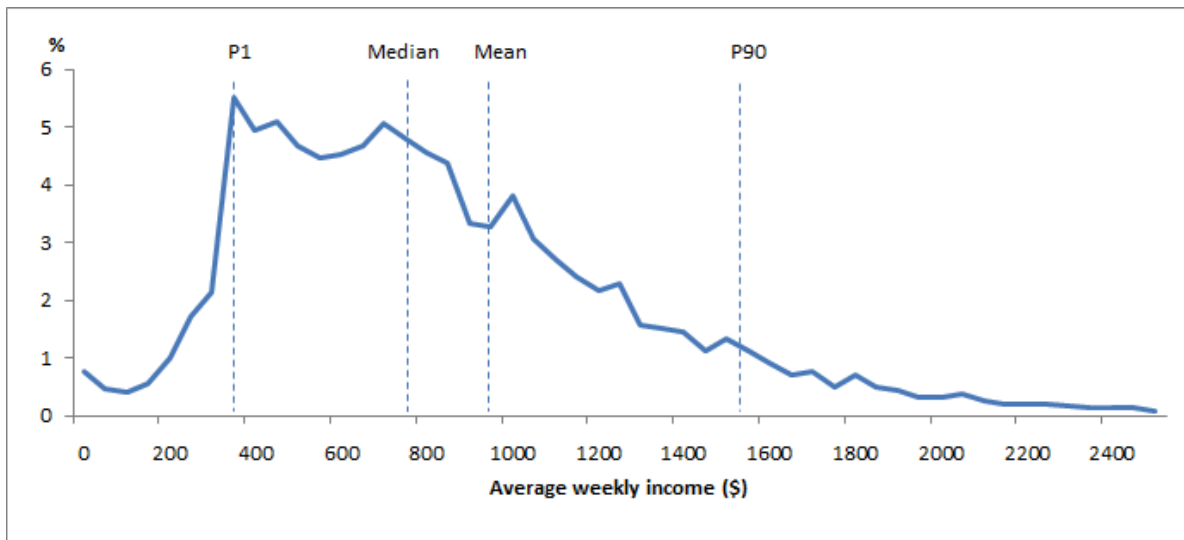
Frequency distribution

Frequency distributions show the proportion of people or households with a particular level of income or wealth. To produce the distribution, the item of interest is ranked by value and the population grouped into classes. The ABS currently uses \$50 ranges for weekly income and \$100,000 ranges for wealth.

It is useful to include the summary statistics such as the mean and median in the frequency distributions. Income and wealth distributions tend to be asymmetrical, with a small number of people having relatively high income or wealth and a much larger number having relatively low income or wealth. (Graph 1)

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Graph 1. Distribution of equivalised disposable household income, 2011-12



Source: ABS data available on request, Survey of Income and Housing (6523.0)

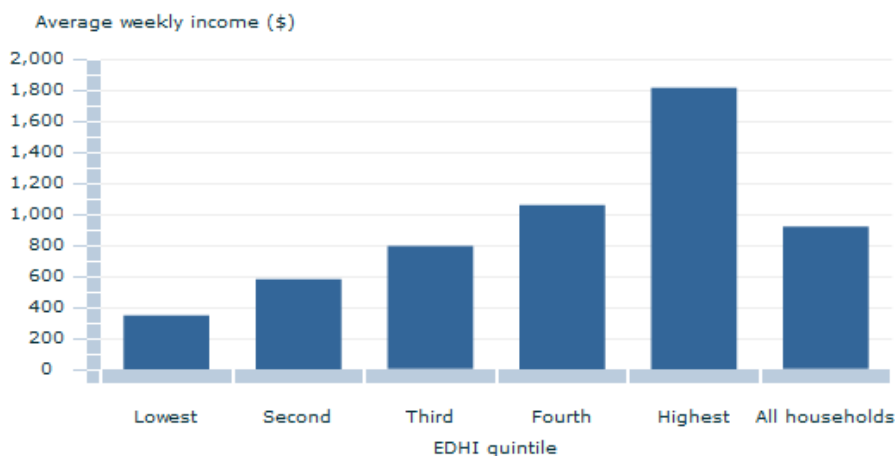
Quantiles

Quantile is a term for groups formed by ranking the units of analysis (e.g. household or persons) in ascending order and calculating the shares of the total accruing to a given proportion of the units:

- quintiles are formed when the population is divided into five equally sized groups
- deciles into ten groups
- percentiles into 100 groups.

Therefore the first quintile will comprise the first two deciles and the first 20 percentiles. The mean or the median may be used to summarise the circumstances within a quantile.

Graph 2. Equivalised disposable household income (EDHI), by quintile, 2011-12



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Source(s): ABS Survey of Income and Housing (6523.0)

Percentile ratios

The boundary between quantiles is usually expressed as the upper value of a particular percentile. The ABS publishes the upper value of each decile (P10 to P90). This provides the range of values in each quintile, e.g. the middle (3rd) quintile is formed by households with income/wealth between P40 and P60. The median of each quintile can also be determined, e.g. the median of the first quintile is P10, second quintile, P30, etc. The median of the whole population is P50.

Percentile ratios summarise the relative distance between two points on the income or wealth distribution. Percentile ratios will be less volatile than measures based on means, particularly at each end of the distribution. To illustrate the full spread of the income distribution, the percentile ratio should use points near the extremes e.g. the P90/P10 ratio. The P80/P20 ratio better illustrates the magnitude of the range for the majority of the population. The P90/P50 and P10/P50 ratios compare the ends of the distribution with the median and these are commonly used to understand how the wealthier compare to average and the poorer to average.

Table 2 shows that income is more equally distributed than wealth. In 2011–12, the equivalised income of households at the top of the 80th percentile (or fourth quintile) was 2.6 times higher than that of households at the top of the 20th percentile (or lowest quintile), whereas wealth was 10 times higher (P80/P20).

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Table 2. Ratio of values at top of selected percentiles, 2011–12

Ratio	Equivalised disposable household income per week	Equivalised household net worth
P90/P10	4.10	45.08
P80/P20	2.61	10.14
P80/P50	1.97	3.77
P20/P50	0.48	0.08

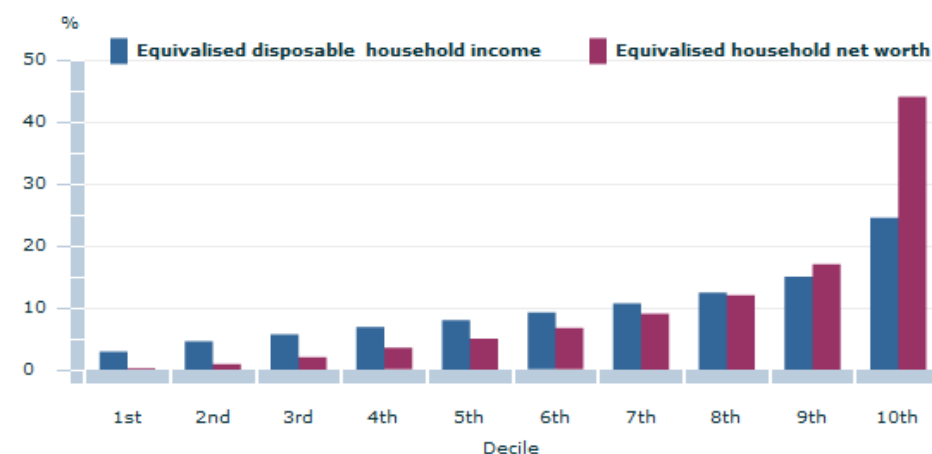
Source: ABS Survey of Income and Housing (6554.0)

Shares of income or wealth

Income or wealth shares can be calculated and compared for each quantile of a population. The aggregate income/wealth of units in each quantile is divided by the total aggregate of the entire population to derive quantile share.

Graph 3 shows income and wealth shares by decile. Household wealth is more unequally distributed than household income. People in the three lowest equivalised income deciles received 13% of all income, whilst people in the three lowest equivalised wealth deciles held only 3% of all wealth in 2011–12.

Graph 3. Share of equivalised household income & net worth (a), 2011–12



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Footnote(s): (a) Decile boundaries are derived separately for equivalised disposable income and net worth

Source(s): ABS Survey of Income and Housing (6554.0)

Gini coefficient

The Gini coefficient is a single statistical indicator of the degree of inequality. It equals zero when all people have the same level of income and equals one when one person receives all the income. In general the smaller the Gini coefficient, the more equal the distribution of income or wealth. Any increase in the income of a person with income greater than the median will always lead to an increase in the Gini coefficient, while an increase in the income of a person with income lower than the median will always lead to a decrease in the coefficient.

The distribution of income becomes more equal when imputed rent and social transfers in kind (STIK) are included in the income measure, down from 0.320 to 0.226 in 2011–12. (Table 3)

Table 3. Gini coefficient, by household income, 2011–12

	<i>Gini coefficient</i>
Equivalised disposable income	0.320
Equivalised disposable income (incl. imputed rent)	0.303
Equivalised disposable income (incl. imputed rent and STIK)	0.226

Source: ABS Survey of Income and Housing, 2011–12 (6523.0) Appendix 4 Social transfers in kind

Measurement Errors

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Sampling Error

Household survey estimates are based on a sample of possible observations and are subject to sampling variability. The sampling error is a measure of the variability that occurs by chance because a sample, rather than the entire population, is surveyed. One measure of the likely difference is given by the standard error (SE). Another measure of the likely difference is the relative standard error (RSE), which is obtained by expressing the SE as a percentage of the estimate. The RSE is a useful measure in that it provides an immediate indication of the percentage errors likely to have occurred due to sampling, and thus avoids the need to refer also to the size of the estimate.

The ABS annotates estimates with a RSE between 25% and less than 50% by a preceding asterisk (e.g. *3.4) to indicate they are subject to high SEs and should be used with caution. Estimates with RSEs of 50% or more are preceded with a double asterisk (e.g. **0.6), indicating that these estimates are considered unreliable for most purposes.

Significance Testing

To compare estimates between surveys or between populations within a survey it is important to determine whether apparent differences are 'real' differences between the corresponding population characteristics or simply the product of differences between the survey samples. A common approach is to determine whether the difference between the estimates is statistically significant by calculating the standard error of the difference between two estimates (x and y) and using that to calculate the test statistic using the formula below:

$$\frac{|x - y|}{SE(x - y)}$$

If the value of the statistic is greater than 1.96 there is good evidence of a statistically significant difference at 95% confidence levels between the two populations for the characteristic being tested. Otherwise, it cannot be stated with confidence that there is a real difference between the populations.

FACT SHEET 3. LOW ECONOMIC RESOURCE HOUSEHOLDS

People living in low economic resource households are of particular policy and research interest because of their greater risk of experiencing economic hardship. This fact sheet summarises different methods available to identify these households and provides guidance on methods of analysing them.

There are many factors influencing whether people are experiencing economic hardship. The analysis of household economic wellbeing is enhanced significantly when the income, consumption and wealth

dimensions are studied jointly, recognising they vary over the lifecycle:

- income is affected by workforce participation
- wealth tends to be accumulated during people's working life and then consumed in retirement
- younger people may have higher expenditure needs e.g. to buy a home or start a family.

In recognition of the importance of this, the ABS has collected both income and wealth in every Survey of Income and Housing (SIH) from 2003–04 (apart from 2007–08). The ABS Household Expenditure Survey (HES) has been conducted six yearly since 2003–04 on a subsample of SIH households. Expenditure, financial stress, income and wealth data are available for HES households.

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The ABS has also produced the Socio-Economic Indexes for Areas (SEIFA) since the 1986 Census. (Box 1)

Box 1. Socio-Economic Indexes for Areas (SEIFA)

Census data (including education, employment, occupation, income and housing) has been used by the ABS to identify the relative socio-economic advantage and disadvantage of geographic areas in Australia compared with other areas.

The 2011 SEIFA includes an Index of Relative Socio-Economic Disadvantage (IRSD) and an Index of Relative Socio-Economic Advantage and Disadvantage (IRSAD).

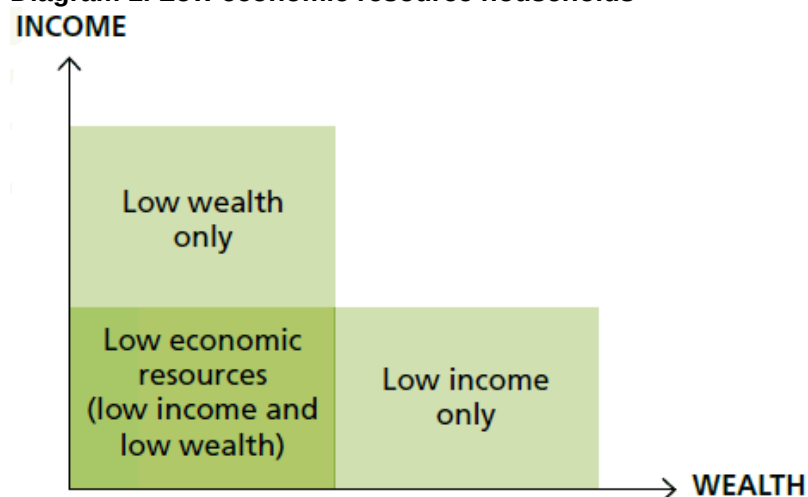
As well as being used to analyse Census data, the IRSD and IRSAD by decile and/or quintile have also been added to survey files (including CURFs) for household surveys such as the SIH, HES and GSS from 2002 onwards.

For more information: *Census of Population and Housing: Socio-Economic Indexes for Areas (SEIFA), Australia, 2011* (2033.0.55.001).

Composite measures of low economic resource households

Low economic resource measure

Diagram 1. Low economic resource households



The ABS has developed a low economic resource measure (LER) that includes people who are simultaneously in the lowest four deciles of both equivalised disposable household income (EDHI) (including imputed rent) and equivalised household net worth (LER40). This measure therefore excludes people with either relatively high incomes or relatively high wealth. As a result it is more likely to correctly classify people at risk of experiencing economic hardship compared to measures using income or wealth alone.

The LER is a relative measure that classifies around 20% of people in low income, low wealth households. It does not identify whether these people are actually experiencing economic hardship. The actual proportion will vary over time as the joint distribution of income and wealth changes. One of the strengths of this measure is its ability to contrast the characteristics of the LER population with those in the low income

and low wealth quintiles.

Table 1 compares selected characteristics of LER households to households with low income or low wealth only. The proportion of couple or lone person households where the reference person is 65 and over, reduces from 28% of low income households to 6% of LER households, reflecting their ability to draw on accumulated wealth. In contrast, whilst 35% of low income households are private renters, this group accounts for 52% of LER households.

Table 1. Persons in low economic resource households, 2011–12

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Household characteristics		Low income (a)	Low wealth (b)	Low economic resource (LER40)(c)	All persons
Mean weekly household income					
Equivalised disposable household income	\$	374	644	496	918
Equivalised disposable household income incl. imputed rent	\$	398	655	501	970
Mean equivalised net worth	\$'000	193	33	54	413
Tenure type					
Owner without a mortgage	%	18.6	0.5*	3.5	25.5
Owner with a mortgage	%	30.5	5.6	26.5	43.3
Private renter	%	34.7	73.8	52.1	25.2
Select household groups					
Couple family with dependent children	%	42.2	33.4	45.8	42.1
One parent family with dependent children	%	14.9	19.3	17.9	6.9
Couple or lone person, 65 and over	%	28.2	0.5	6.4	7.8

* estimate has a relative standard error of 25% to 50% and should be used with caution

(a) Persons in the lowest two deciles of EDHI (incl. imputed rent)

(b) Persons in the lowest two deciles of equivalised household net worth

(c) Persons in the lowest four deciles of both EDHI (incl. imputed rent) and equivalised household net worth

Source: ABS Survey of Income and Housing (6523.0) Feature Article: Low Economic Resource Households

Other composite measures of economic hardship

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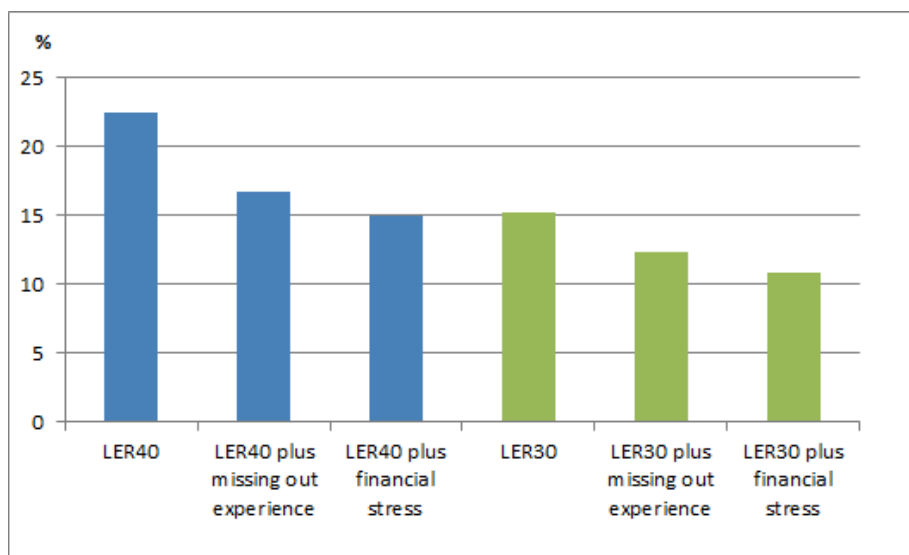
The LER measure can be broadened by considering experiences of 'financial stress' or 'missing out'. The indicators used to define these measures are listed in Table 3 of this fact sheet.

Graph 1 shows examples of LER measures by:

- varying the cut-off for low income and low wealth 40th percentile (LER40) or 30th percentile (LER30), then
- adding whether the household experienced 'financial stress' or 'missing out'.

In 2009–10, 23% of people lived in LER40 households and 15% in LER30 households. When experiences of 'financial stress' are also considered this reduces to 15% of LER40 and 11% of LER30 households.

Graph 1. Measures of low economic resource households, proportion of persons, 2009-10



Source: ABS data available of request, Household Expenditure Survey (6530.0)

Single dimension measurement of household economic wellbeing

When measuring economic wellbeing it is preferable to consider multiple dimensions, particularly income and wealth, however both measures are not always available. This section describes several commonly used single dimension measures of economic wellbeing.

Income

Income is the most frequently available measure of economic wellbeing. For most households, it is the main resource used to meet daily expenses. However, analysis using income alone has significant limitations. Income can be volatile for people who are making transitions between study, jobs, into retirement or changing their hours of work e.g. to care for children. At these times, households may draw on other resources, such as using savings or increasing their debt.

Being able to identify households with accumulated wealth to supplement low incomes is desirable as these people are less likely to experience economic hardship than households without alternative resources to fall back on.

a) Relative poverty measures based on income

Many developed countries use relative poverty to measure the economic wellbeing of households. These measures identify the proportion of people with an income below a certain fraction of median EDHI. The OECD publishes various analyses based on poverty lines below 40%, 50% or 60% of median incomes (50% used most often), while Eurostat commonly uses 60% as the cut-off.

Limitations of relative poverty measures include:

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- the number of people in poverty is determined by an arbitrary fraction of income (which may not reflect actual hardship).
- the proportion of people identified can change dramatically e.g. in Australia, real median incomes have risen significantly in recent years and the thresholds identified at 40% and 50% of the median are very sensitive to changes in single and couple pension payment points relative to the median.
- the definition and measurement of income can have a significant impact e.g. imputed rent (IR) and social transfers in kind (STIK) are often excluded from income definitions. However, the benefits received from either owning a home or receiving subsidised rent (valued by imputing an equivalent rental income), or from receiving services from the government, impact significantly on the economic wellbeing of particular groups e.g. a person able to access free or subsidised health care can be better off than a person with similar income but not able to access these social provisions.

Table 2 shows that the proportion of the Australian population below a relative poverty line varies between 20% (using 60% of median EDHI) and 2% (using 40% of median EDHI including IR and STIK).

Table 2. Relative poverty measures based on proportion below a percentage of median income, 2011–12

	<i>Equivalised disposable household income</i>	<i>Equivalised disposable household income incl. imputed rent</i>	<i>Equivalised disposable household income incl. imputed rent and STIK</i>
	PROPORTION OF PERSONS IN HOUSEHOLDS		
40% of median income	5.5	4.7	2.0
50% of median income	12.0	9.3	3.9
60% of median income	20.1	15.4	7.3

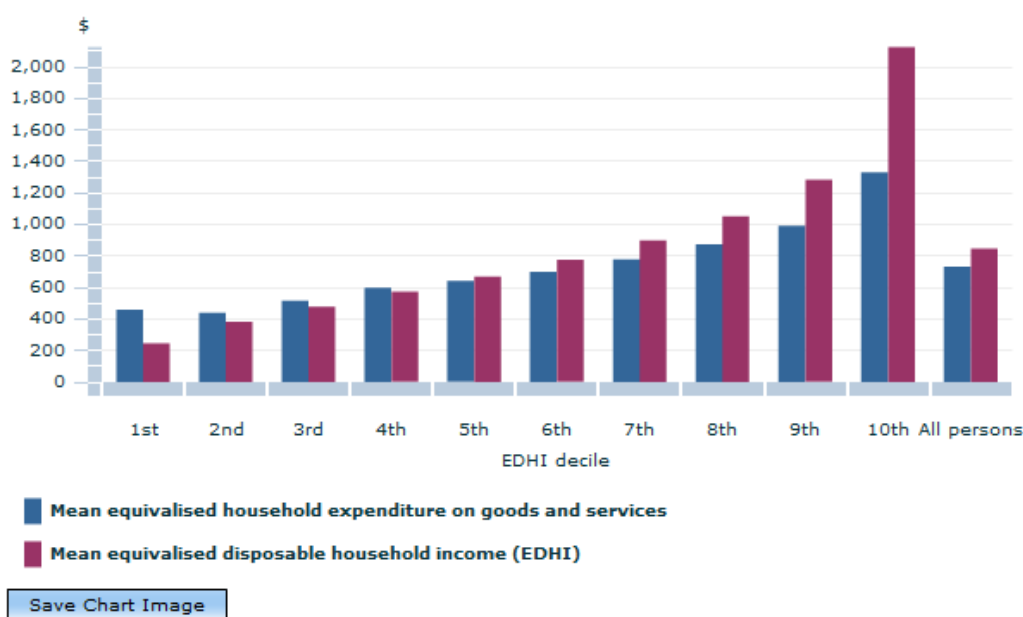
Source: ABS data available on request, Survey of Income and Housing (6523.0)

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b) Using the second and third deciles to describe low income households

While it is tempting to label all households in the lowest income decile as 'low income', ABS analysis suggests there are variable economic circumstances for households in this group. Households with nil or negative income, or income below government pension rates, make up almost one half of the lowest income decile. However, more than 40% of households in the lowest income decile have net worth in the top five wealth deciles, suggesting a temporary setback to their economic wellbeing, such as a temporary loss in their business operations or a temporary job loss.

Graph 2. Equivalised weekly income & expenditure, by equivalised income decile, 2009–10



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Source(s): ABS Survey of Income and Housing: ABS Household Expenditure Survey (6530.0)

Furthermore, people in the lowest decile of EDHI had average equivalised expenditure higher than those in the second income decile in 2009–10. (Graph 2) The ABS therefore uses the second and third income deciles to describe 'low income' households rather than the lowest income quintile.

However, as the lowest decile includes many households whose only source of income is a government pension or allowance, some people in the lowest income decile experience high levels of economic hardship. Therefore, for many analytical purposes a lower cut-off should be applied to only remove extreme low value households that may distort the results. In 2011–12, Age Pension rates (excluding supplementary payments) for singles and couples were around the 7th percentile of EDHI.

Financial stress indicators

While income and wealth statistics describe the economic resources available to people and expenditure statistics describe their consumption patterns, there are other issues relevant to understanding living standards e.g. a person with poor health and high health care costs may have reduced income for other purchases. In attempting to identify which households have the lowest economic wellbeing, other indicators of poor economic outcomes can be considered. Data relating to experiences of financial stress and missing out are collected in the HES. (Table 3)

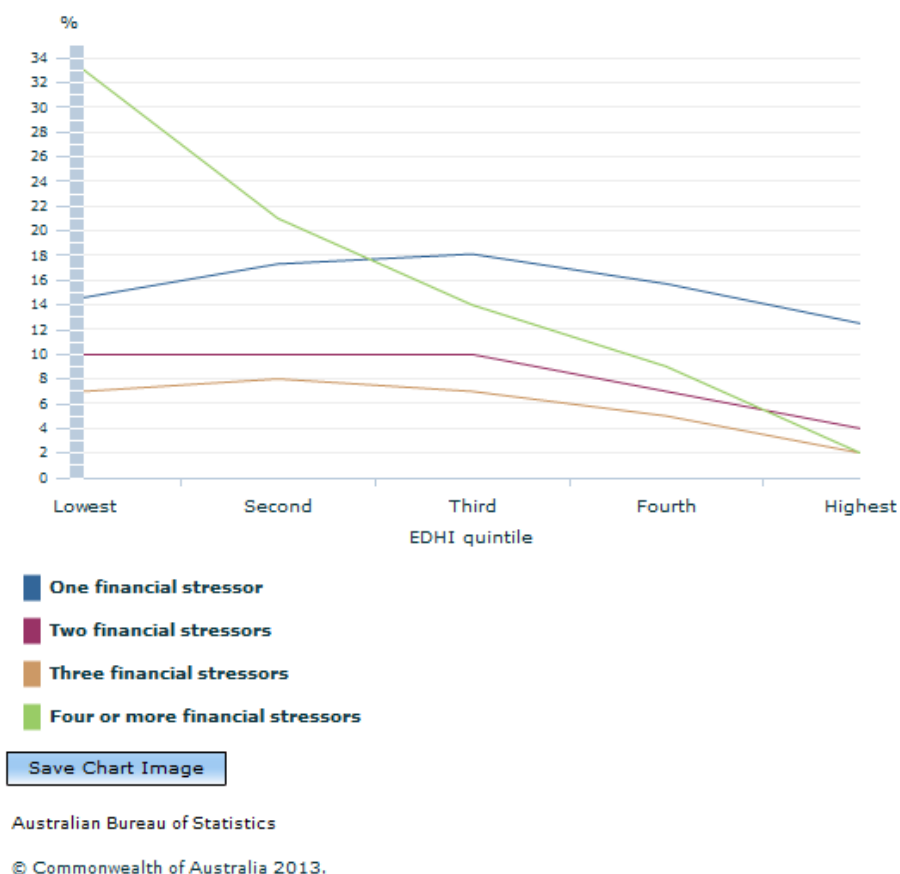
Table 3. Indicators of financial stress in the last 12 months

Financial stress experiences	Missing out experiences
Unable to raise \$2000 in a week for something important	Could not afford holiday for at least one week a year
Spend more money than received	Could not afford a night out once a fortnight
Could not pay gas, electricity or telephone bill on time	Could not afford friends or family over for a meal once a month
Could not pay registration or insurance on time	Could not afford special meal once a week
Pawned or sold something	Could only afford second hand clothes most of the time
Went without meals	Could not afford leisure or hobby activities
Unable to heat home	
Sought assistance from welfare/community organisations	
Sought financial help from friends or family	

Source: ABS Household Expenditure Survey, 2009–10 (6530.0)

Financial stress information can provide insight into people's economic wellbeing although analysis needs to consider overall circumstances. Some individuals may have consumption priorities which differ from socially accepted norms of the 'basics of life'. In 2009–10, 20% of households in the highest EDHI quintile reported at least one financial stress indicator. (Graph 3)

Graph 3. Proportion of households experiencing financial stress in the last 12 months, by income quintile, 2009-10



Source(s): ABS Household Expenditure Survey (6530.0)

Measuring persistent economic hardship

Another key policy interest is people experiencing long-term and persistent economic hardship as distinct from those experiencing short-term hardship.

Longitudinal datasets, such as the Household Income and Labour Dynamics Australia Survey (HILDA) and the ABS Australian Census Longitudinal Dataset (ACLD), are important sources for identifying people experiencing long-term economic hardship. The HILDA has been tracking the economic circumstances of many respondents since 2001. The ACLD will provide a five-yearly snapshot of the income and housing circumstances of people from 2006.

The SIH measures the short-term persistence of economic hardship by comparing income from the previous financial year with current year income. The circumstances of people with low incomes in both periods can be identified. Combined with wealth data which is more stable over time, this provides a more accurate picture of whether hardship is persistent.

As well as financial stress experiences, the HES also collects data on people's perception of their current financial circumstances compared to two years ago and their ability to save money.

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FACT SHEET 4. KEY DATA SOURCES

Key data sources

There are many useful data sources providing information on the economic wellbeing among households in Australia. This fact sheet uses the ABS Data Quality Framework to provide information about the following key data sources (Tables 1 and 2):

- Survey of Income and Housing (SIH)
- Household Expenditure Survey (HES)
- General Social Survey (GSS)
- Census of Population and Housing (Census)
- Australian Census Longitudinal Dataset (ACLD)
- Australian System of National Accounts (ASNA)
- Household Income and Labour Dynamics in Australia Survey (HILDA).

Administrative data can also be used to undertake analyses of wellbeing. Potential opportunities arising from some key datasets (Diagram 1):

- Australian Taxation Office (ATO) Personal income tax
- ATO Business income tax and Employer Pay as you go (PAYG) payment summaries
- Centrelink and Department of Veterans' Affairs (DVA) income support payments
- Medicare Benefits Scheme (MBS).

Table 1. Key data sources

Data quality dimension	Survey of Income and Housing (SIH)	Household Expenditure Survey (HES)	General Social Survey (GSS)
Institutional environment	Australian Bureau of Statistics		
Relevance			
<i>Main economic wellbeing topics</i>	Income, wealth, housing, labour	Expenditure, income, wealth, financial stress, housing, labour	Income, financial stress, housing and homelessness, labour
<i>Other topics</i>	Child care	Child care, disability	Social inclusion topics e.g. social networks, feelings of safety, transport
<i>Data collection</i>	Cross-sectional survey (CAPI) of all usual residents 15 years and over	Cross-sectional survey (CAPI) of all usual residents 15 years and over	Cross-sectional survey (CAPI) of one usual resident 18 years and over (15 years and over from 2014)
<i>Years available</i>	1994–95 to 1997–98, 1999–2000, 2000–01, 2002–03, 2003–04 then every two years	1984, 1988–89, 1993–94, 1998–99, 2003–04, 2009–10	2002, 2006, 2010
<i>Scope and populations included</i>	Usual residents of private dwellings excl. very remote areas in Australia (97% of population)	Usual residents of private dwellings excl. very remote areas in Australia (97% of population)	Usual residents of private dwellings excl. very remote areas in Australia (97% of population)
<i>Period of field work</i>	Financial year (June – July)	Financial year (June – July)	March – July
Timeliness	Biennial survey, output released about 12 months after reference period	Six yearly survey, output released about 14 months after reference period	Four yearly survey, output released about 14 months after enumeration
Accuracy			
<i>Sample size</i>	About 14,600 households	About 9,800 households	About 15,100 households

<i>Response rates</i>	About 80%	About 73%	About 88%
Coherence	Methodological and income definition improvements in 2003–04 and 2007–08	Methodological and income definition improvements in 2003–04 and 2007–08	Consistent methodology and definitions
Interpretability <i>Documentation</i>	User Guide (6553.0) All User Guides including meta data and copy of questionnaire are available on ABS web site <www.abs.gov.au>, search by catalogue number	User Guide (6503.0)	User Guide (4159.0.55.002)
Accessibility <i>Summary outputs</i>	Income incl. detailed tables (6523.0) Wealth publication (6554.0) Housing (4130.0)	Expenditure incl. detailed state and commodity tables (6530.0 [2009–10] and 6535.0.55.001[2003–04]) Government benefits and taxes (6537.0)	Publication (4159.0) State tables (4159.0.55.003 [2010] and 4159.[0...8].55.001 [2006])
<i>Microdata</i>	Confidentialised unit record files (CURFs) available – search 'Microdata' on ABS web site home page		

Table 1. Key data sources continued

Data quality dimension	Census of Population and Housing (Census)	Australian Census Longitudinal Dataset (ACLD)	Australian System of National Accounts (ASNA)	Household, Income and Labour Dynamics in Australia Survey (HILDA)
Institutional environment	Australian Bureau of Statistics			Melbourne Institute (funded by Dept of Social Services)
Relevance				
<i>Main economic wellbeing topics</i>	Income, housing, labour	Income, housing, labour	Income, consumption, savings and wealth	Income, expenditure and labour (core topics), wealth (on rotation)
<i>Other topics</i>	Household and family composition, disability, language and culture	Household and family composition, disability, language and culture	Not applicable	Life events and satisfaction, health, family, caring, attitudes, retirement plans
<i>Data collection</i>	Census of all persons in Australia using self-enumerated paper or electronic questionnaire	Census of all persons in Australia using self-enumerated paper or electronic questionnaire	Various – business and household survey data; administrative data	Longitudinal survey (CAPI/ CATI) of Australian residents 15 years and over
<i>Years available</i>	Annually from 1911 to 1954, then 5 yearly from 1961 to 2011	Census 2006 and 2011 linked data	Annually and quarterly from July 1959 for income, consumption and savings;	Wave 1 in 2001, then annually for Waves 2 to 12

<i>Scope and populations included</i>	All residents of Australia and Australian territories (excl. Norfolk Island) (100% of population)	All residents of Australia and Australian territories (excl. Norfolk Island) (100% of population)	All households in Australia incl. non-private dwellings and non-profit institutions serving households	Australian residents of private dwellings, excl. remote and very remote areas (96% of pop.) [Wave 1] from Wave 2 incl. remote and very remote
<i>Period of field work</i>	Census night (in August)	Census night (in August)	Financial year	About 18 weeks during August to February
Timeliness	Five yearly census, data released in waves (from 10 months after Census night)	Available in late 2013	Preliminary release after reference period – annual (4 months); quarterly (2 months)	Annual survey, output released about 12 months after reference period
Accuracy				
<i>Sample size</i>	About 21.5 million people	About 1 million people	Not applicable	9,500 households in Wave 11 (incl. 2,150 from Top-Up sample)
<i>Response rates</i>	About 96%	Not applicable	Not applicable	Wave 1 response 66% Attrition rate each wave between 4% and 13%
Coherence	Regular classifications changes managed by producing correspondences between old and new classifications	Regular classifications changes managed by producing correspondences between old and new classifications	Complete time series recompiled to new basis whenever treatments change	Consistent methodology income model improved periodically
Interpretability				
<i>Documentation</i>	How Australia Takes a Census (2903.0) 2011 Census dictionary (2901.0) Census Products and Services (2011.0.55.001)	How Australia Takes a Census (2903.0) 2011 Census dictionary (2901.0) Census Products and Services (2011.0.55.001)	ASNA Concepts, Sources and Methods (5216.0)	User manual, program library and questionnaires
	All User Guides including meta data and copy of questionnaire are available on the ABS web site <www.abs.gov.au>, search by catalogue number			www.melbourneinstitute.com/hilda/doc/
Accessibility				
<i>Summary outputs</i>	Select 'Census' on ABS web site home page, then 'Data and analysis' <ul style="list-style-type: none"> QuickStats Community profiles TableBuilder DataPacks SEIFA Census Sample Files 	Select 'Census' on ABS web site home page, then 'Data and analysis' <ul style="list-style-type: none"> QuickStats Community profiles TableBuilder DataPacks SEIFA Census Sample Files ACLD 	<ul style="list-style-type: none"> Annual publication (5204.0) quarterly publications (5206.0, 5232.0) 	www.melbourneinstitute.com/hilda/biblio/

- ACLD

Microdata	Access via Tablebuilder	ABS charged consultancies only via Tablebuilder	Not applicable	CNEF and unit record data are available www.melbourneinstitute.com/hilda/data/
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Table 2. Strengths and limitations of key data sources

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SIH	HES	Census	ASNA	HILDA
Strengths				
<ul style="list-style-type: none"> • Most accurate and representative measure of income and wealth distributions • Most comprehensive measures of income incl. imputed rent and social transfers in kind • Data collected over a 12 month period allows for seasonal variations • Wealth in every cycle since 2003–04 (excl. 2007–08) 	<ul style="list-style-type: none"> • Captures household consumption expenditure by very detailed commodity • Enables joint analysis of income, expenditure, wealth and financial stress • Fiscal incidence study undertaken for every HES 	<ul style="list-style-type: none"> • Coverage of total population • Output available for very fine level spatial analysis, e.g. statistical area • Analysis of special populations, e.g. migrants, disabled and Aboriginal and Torres Strait Islander peoples 	<ul style="list-style-type: none"> • Covers all economic activity of households • Provides per capita and savings estimates • Annual and quarterly time series available 	<ul style="list-style-type: none"> • Longitudinal analysis following circumstances of individuals over time • Survey conducted annually • Broad range of topics (core or on a rotational basis) • Unconfidentialised data available to approved Australian researchers (excl. name and address)
Limitations				
<ul style="list-style-type: none"> • Impact of income definition and methodological improvements on time series [mitigated by output of income for both current and previous income definitions (see <i>Changes over time</i> fact sheet 5)] 	<ul style="list-style-type: none"> • Income data affected by methodological improvements (as for SIH) • Some expenditure known to be under-reported e.g. alcohol and gambling 	<ul style="list-style-type: none"> • Personal income collected in ranges only • Method of calculating household income less accurate as based on ranged personal income data • Fully self-enumerated questionnaire may lead to higher levels of data misreporting 	<ul style="list-style-type: none"> • No household distributional data available across time • Household sector includes activity of non-profit institutions serving households 	<ul style="list-style-type: none"> • Longitudinal surveys prone to sample and attrition bias over time [Sample weight adjustments and wave 11 general sample Top-Up to mitigate bias] • More difficult to ensure sample represents total population than cross-sectional surveys

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Subpopulations

The economic circumstances of some subpopulations are of particular interest to researchers and policymakers as they have been identified as being at greater risk of experiencing economic disadvantage. As well as Census data, there are data sources specific to each subpopulation.

Migrants

The ABS produces a range of data on the economic wellbeing of migrants. This includes:

- *Migrant Data Matrices* (3415.0) – provide information from a range of ABS data sources including personal and household finances from SIH and HES and wellbeing measures from the GSS. Data are updated annually.
- *Understanding Migrant Outcomes - Enhancing the Value of Census Data, Australia, 2011* (3417.0). Records from the Department of Immigration and Border Protection Settlements Database (SDB) are linked to ABS 2011 Census data. Included are data on employment and income of migrants by migration stream (e.g. Skilled, Family and Humanitarian), whether primary or secondary applicants and whether they had applied onshore or offshore.

Disabled people and carers

The *Survey of Disability, Ageing and Carers (SDAC)* is a cross-sectional survey conducted every three years in both private and non-private dwellings. Data are available for 1993, 1998, 2003, 2009 and 2012. Includes long-term health conditions and care requirements (including for older people), financial impacts on carers and income.

The latest output is *Disability, Ageing and Carers, Australia: Summary of Findings, 2012* (4430.0). A CURF will also be available in early 2014.

Aboriginal and Torres Strait Islander peoples

The *National Aboriginal and Torres Strait Islander Social Survey (NATSISS)* is a cross-sectional survey conducted every six years. Data are available for 1994, 2002 and 2008.

Data are collected from Aboriginal and Torres Strait Islander peoples in private dwellings in both remote and non-remote areas, including income and finances, work, housing and mobility and financial stress.

The latest output is *National Aboriginal and Torres Strait Islander Social Survey, 2008* (4714.0). A CURF is also available.

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Box 1. International comparisons - Luxembourg Income Study (LIS)

The LIS is a cross-national data centre consisting of two databases:

- *Luxembourg Income Study Database*
- *Luxembourg Wealth Study Database*.

The LIS harmonises micro data to enable international comparisons. Income data is available from 45 countries and wealth data from 12 countries. Registered researchers can apply for remote access to the data for non-commercial purposes.

For more information: www.lisdatacenter.org

Integrating administrative data to measure economic wellbeing

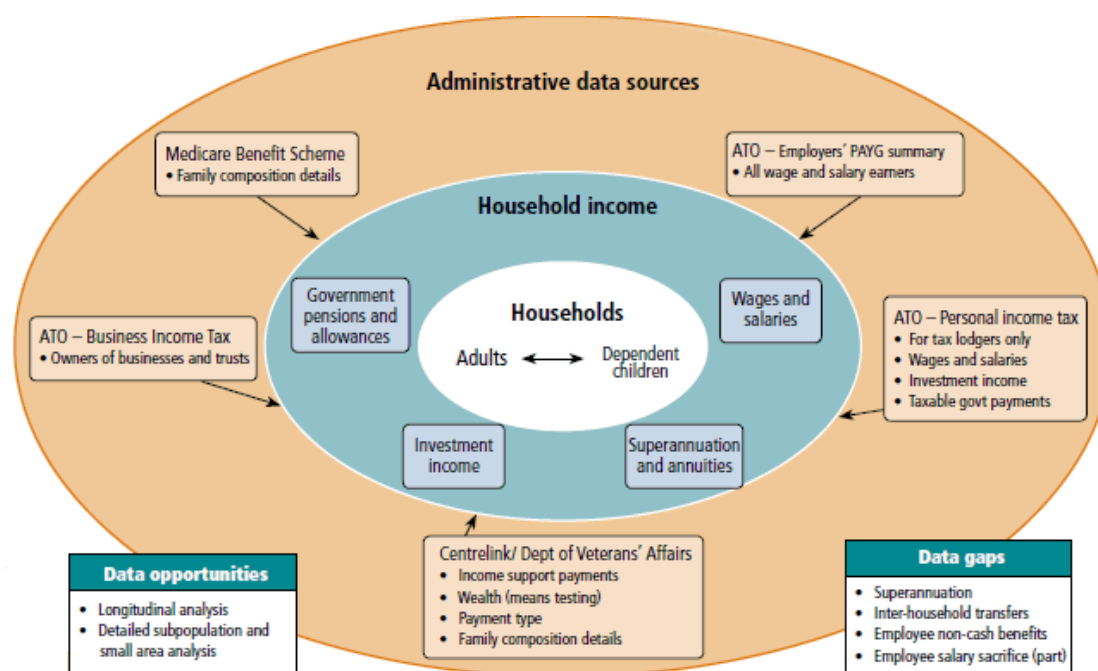
Statistical data integration involves bringing together data from different sources at the unit level (e.g. for an individual person or organisation) or micro level (e.g. information for a small geographic area) to enable analysis of a combined set of information for statistical and research purposes.

Analysis of integrated administrative and other data offers valuable opportunities to investigate more complex and expanded policy and research questions than would be possible using only separate, unlinked data sources. As the data is already collected for an administrative purpose, it can be used without imposing additional burden.

Administrative datasets provide opportunities for both cross-sectional analysis of society, small areas and subpopulations of interest, along with longitudinal analysis of the circumstances of individuals, households or families.

Diagram 1 shows how administrative data sources relate to the concepts of household economic wellbeing.

Diagram 1. Household economic wellbeing measures and relationships based on administrative data



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FACT SHEET 5. CHANGES OVER TIME

Changes in the levels and distribution of economic resources in a society over time are key concerns of social and economic analysts. This fact sheet presents time series analysis of the three dimensions of household economic wellbeing – income, consumption and wealth.

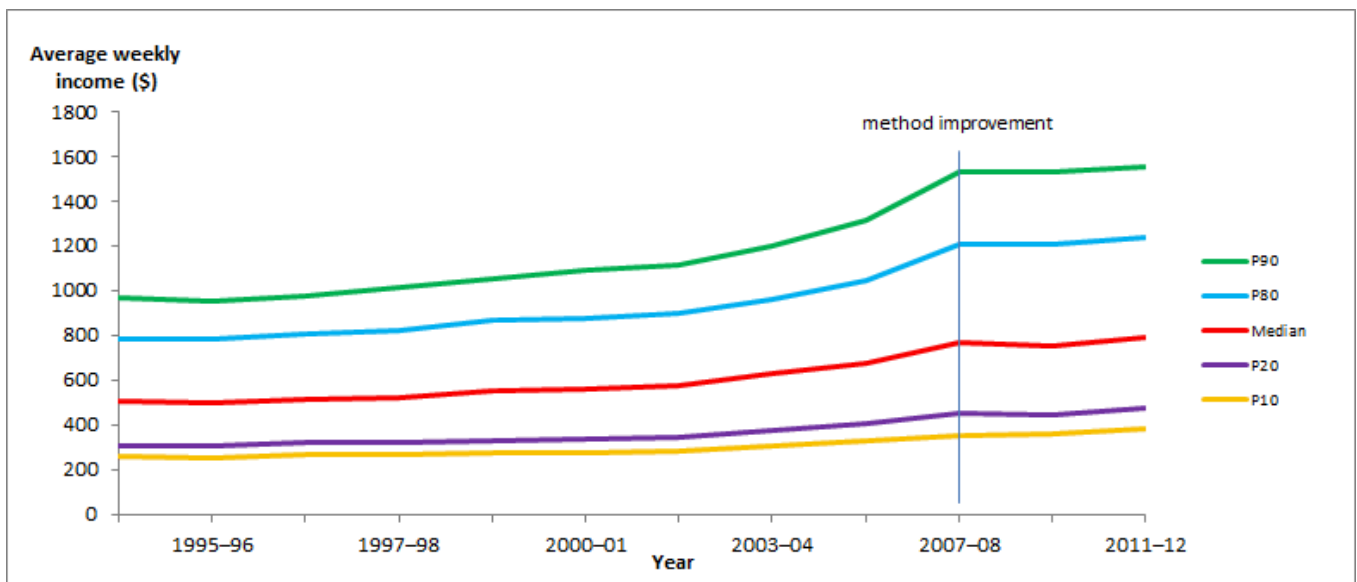
The analysis uses data from the Survey of Income and Housing (SIH), Household Expenditure Survey (HES) and Household Income and Labour Dynamics in Australia Survey (HILDA).

Income

Income data has been collected in the HES since 1984 and in the SIH since 1994–95.

Since 1994–95, median equivalised disposable household income (EDHI) has increased in real terms from \$505 to \$790 (up 56%). Low income households have had a slightly lower real increase in their average income (47% at top of P10) than high income households (60% at top of P90). (Graph 1)

Graph 1. Equivalised disposable household income at top of selected percentiles, 1994–95 to 2011–12(a)



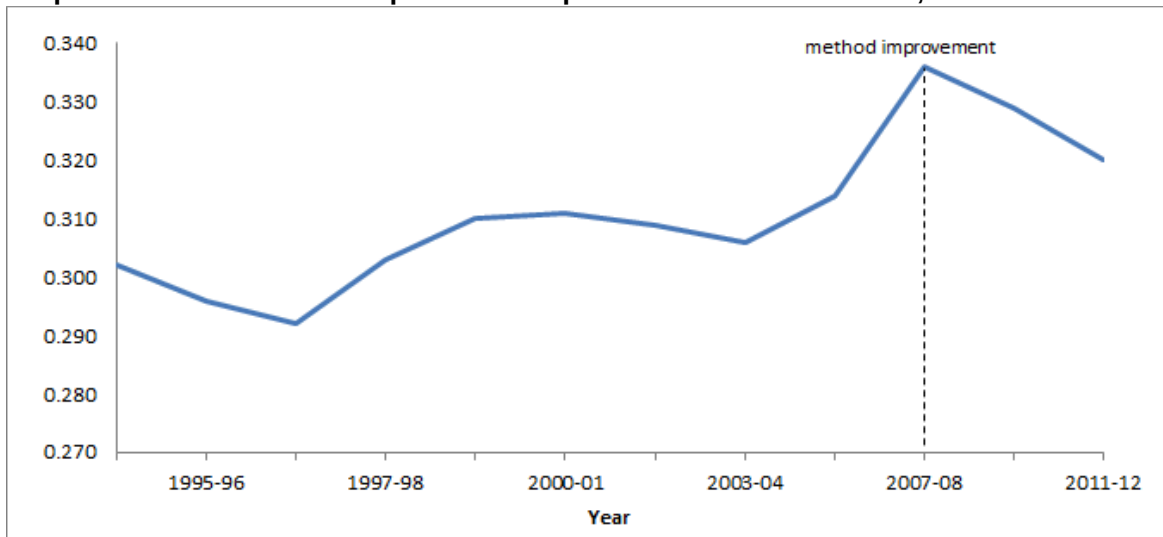
(a) In 2011-12 dollars, adjusted using changes in the Consumer Price Index
Source: ABS Survey of Income and Housing (6523.0)

Average wages and salaries and government pensions and allowances both increased significantly in real terms between 1994-95 and 2011-12 (52% and 24%, respectively).

The Gini coefficient is a single statistic between zero and one and is a summary indicator of the degree of inequality, with values closer to 0 representing less inequality, and values closer to one representing greater inequality. Since 1994-95, the Gini coefficient for EDHI has been lowest in 1996-97 (0.292) and highest in 2007-08 (0.336). It decreased by 5% between 2007-08 and 2011-12. (Graph 2)

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Graph 2. Gini coefficient of equivalised disposable household income, 1994-95 to 2011-12



Source: ABS Survey of Income and Housing (6523.0)

The HILDA survey provides valuable insight into economic circumstances over time and the persistence of income disadvantage for individual households. Two thirds of households with a low income (lowest two income quintiles) in 2001 continued to have a low income in 2009. Similarly, over 60% of high income households (highest two quintiles) in 2001, remained at the top of the income distribution in 2009. (Graph 3)

Graph 3. Comparison of income levels in 2001 & 2009



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Source(s): HILDA Families, Income and Jobs, Volume 7

Improvements in the SIH since 2003–04

The ABS has implemented improvements to the SIH to ensure the survey accurately measures the distribution of economic resources among households in Australia, including:

2003–04

- Integration of the SIH with the HES
- Computer assisted personal interviewing (CAPI) introduced
- Sample design improved
- Extra income questions (incl. non-cash and irregular income; salary sacrificed income specifically collected)
- New benchmarking methods
- Wealth data and imputed rent for first time

2007–08

- Further improvements to income incl. lump sum payments, financial support from family and trusts
- Implementation of new income definition incl. recompiling 2003–04 and 2005–06 where possible

2009–10

- Wealth data every SIH
- SIH income and wealth comparison with Australian System of National Accounts (ASNA) published in appendices of 6523.0 and 6554.0

2011–12

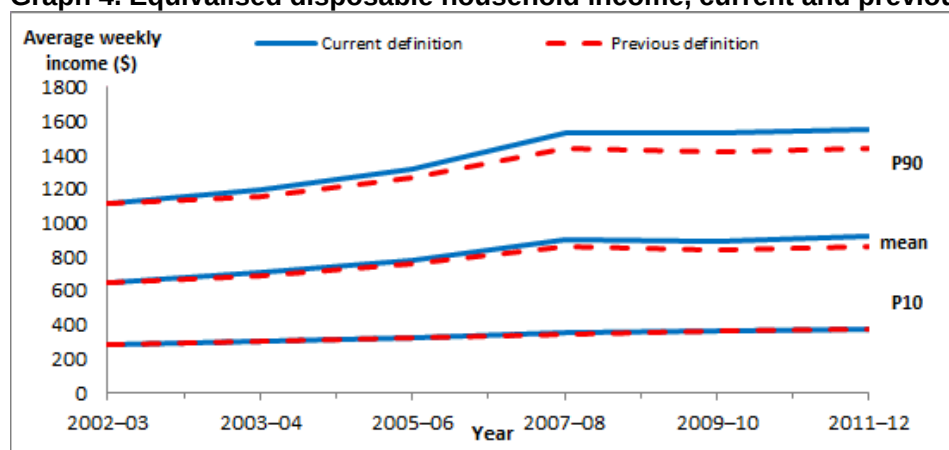
- Social transfers in kind (STIK) allocated in every SIH

2013–14

- Previous HES only items incl. disability and health care cards in every SIH to improve STIK allocations
- More detailed superannuation information

Graph 4 shows the impact of improvements in the measurement of income introduced in SIH 2007–08 and recompiled where data was available for 2003–04 and 2005–06. The improvements had most impact on households at the top of the income distribution, mainly from wages and salaries. In 2011–12, the EDHI for households at the top of P90 was 8% higher than the previous income definition while in 2005–06 it was 4% higher. At the top of P10 the changes increased EDHI by 1% in 2011–12, while mean weekly income increased by 3% in 2005–06 and 6% in 2011–12.

Graph 4. Equivalised disposable household income, current and previous income definition(a)

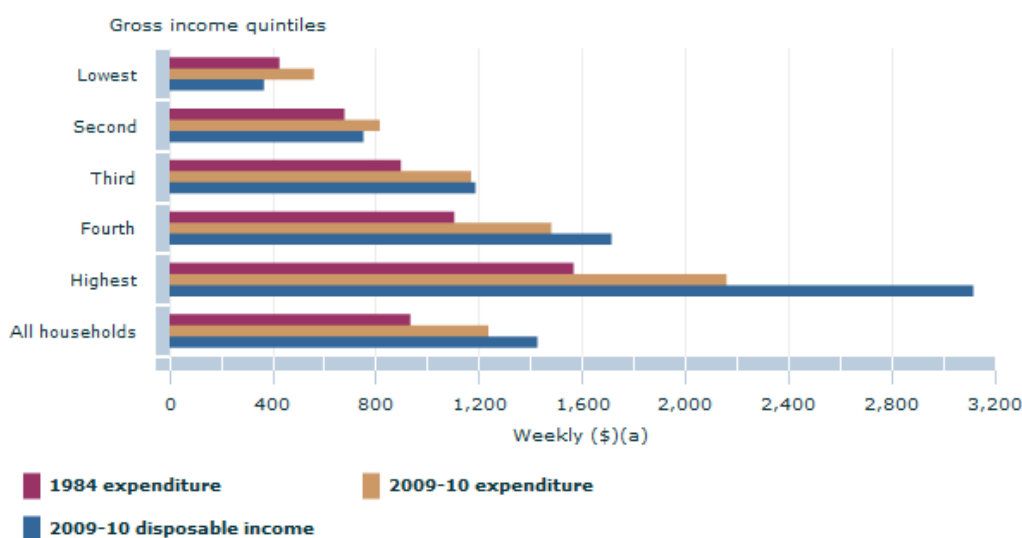


(a) In 2011-12 dollars, adjusted using changes in the Consumer Price Index
Source: ABS Survey of Income and Housing (6523.0)

Consumption expenditure

As incomes have risen, consumption expenditure has also risen. Between 1984 and 2009–10 average weekly expenditure of all households increased in real terms by one third from \$933 to \$1,236. The increase in expenditure was greatest for households in the fourth and fifth gross income quintiles. In these quintiles average income exceeded average consumption expenditure by 14% and 31%, respectively in 2009–10. By comparison, households in the lowest two income quintiles had average expenditure higher than their average disposable income. (Graph 5)

Graph 5. Average expenditure & disposable income, by gross income quintile, 1984 & 2009-10



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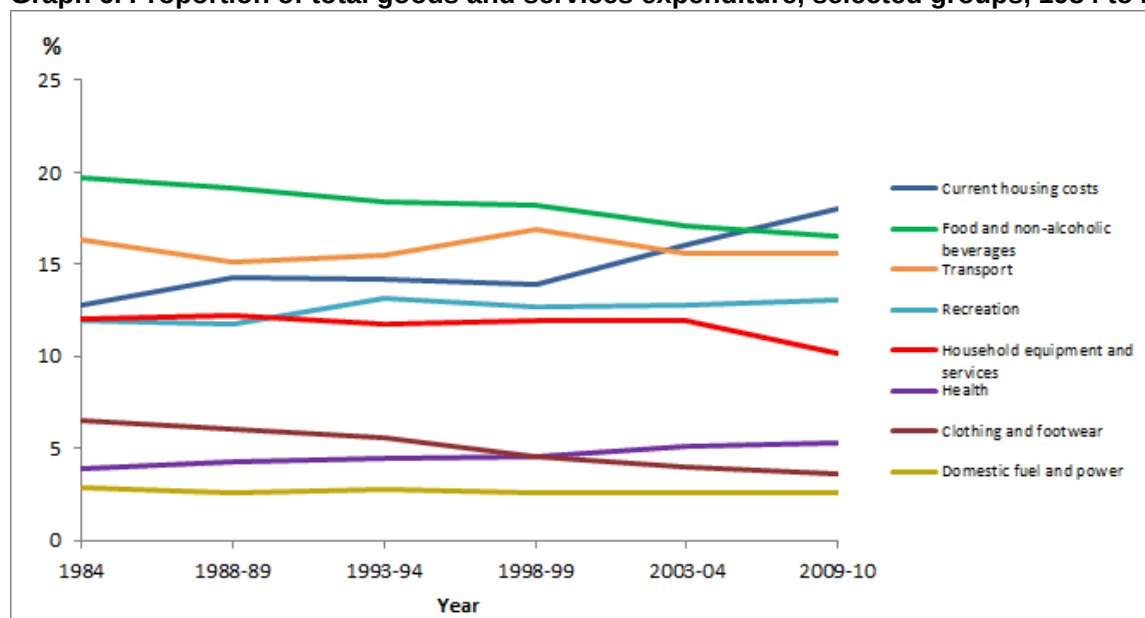
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Footnote(s): (a) In 2009-10 dollars, adjusted using changes in the Consumer Price Index

Source(s): ABS Household Expenditure Survey (6530.0)

Consumption patterns of households have changed since 1984. Current housing costs increased from 13% of total household expenditure on goods and services in 1984 to 18% in 2009–10. The proportion of expenditure on food and non-alcoholic beverages declined gradually in the same period (from 20% to 17% of total consumption expenditure), while spending on clothing and footwear almost halved (from 7% to 4% of total). (Graph 6)

Graph 6. Proportion of total goods and services expenditure, selected groups, 1984 to 2009-10



Source: Household Expenditure Survey (6530.0)

Improvements in the HES since 1998–99

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1998–99

- Household Expenditure Classification (HEC) replaced HES Commodity Code List for classifying expenditure
- Financial stress indicators collected for first time

2003–04

- HES and SIH integrated (HES for a subsample of SIH respondents)
- Expenditure, income, wealth and financial stress available for all HES households

2009–10

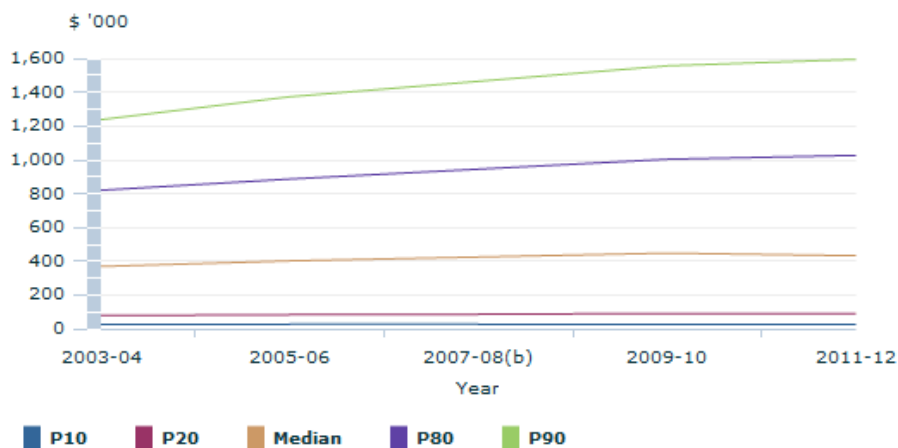
- Non-cash benefits from employers included in consumption expenditure
- Expenditure also classified by the international Classification of Individual Consumption by Purpose (COICOP)
- Extra metropolitan sample of households with main source of income government pensions and allowances added to HES for development of a Pensioner and Beneficiary Living Cost Index
- HES expenditure comparison with the ASNA published in Appendix 3 of 6530.0

Wealth

The distribution of wealth in Australia is less equal than income. Comprehensive information on the composition of the assets and liabilities held by households has been collected in the SIH since 2003–04. Previously, the value of owner occupied dwellings and loans on those dwellings were the only wealth data collected in these surveys.

Median net worth has increased in real terms from \$369,000 in 2003–04 to \$434,000 in 2011–12. The average net worth of high wealth households has increased by more than the net worth of low wealth households e.g. the net worth of households at the top of the fourth quintile (P80) increased by 25% (to \$1m) while the net worth of households at the top of the lowest quintile (P20) increased by 12% (to \$88,000) in the eight year period to 2011–12. (Graph 7)

Graph 7. Household net worth at top of selected percentiles, 2003-04 to 2011-12(a)



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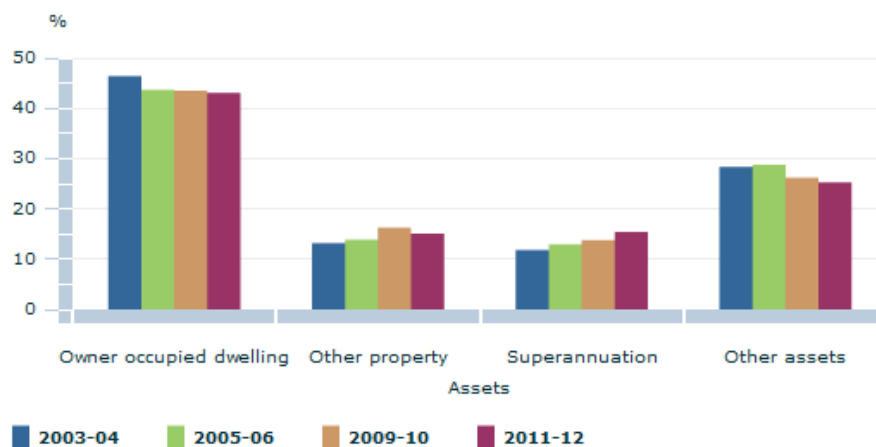
Footnote(s): (a) In 2011-12 dollars, adjusted using changes in the Consumer Price Index (b) Wealth data not available for 2007-08

Source(s): ABS Survey of Income and Housing (6554.0)

The composition of assets has remained relatively stable between 2003–04 and 2011–12. Property assets (own dwelling and other property) comprised just under 60% of total assets in both years, although there was a slight reduction in the proportion for owner occupied dwellings offset by a small increase in other property. Superannuation rose from 12% to 15% of total household assets in the same period. (Graph 8)

Property loans made up a slightly higher proportion of liabilities in 2011–12 (90%) than in 2003–04 (86%).

Graph 8. Composition of assets, 2003-04 to 2011-12(a)



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Footnote(s): (a) In 2011-12 dollars, adjusted using changes in the Consumer Price Index

Source(s): ABS Survey of Income and Housing (6554.0)

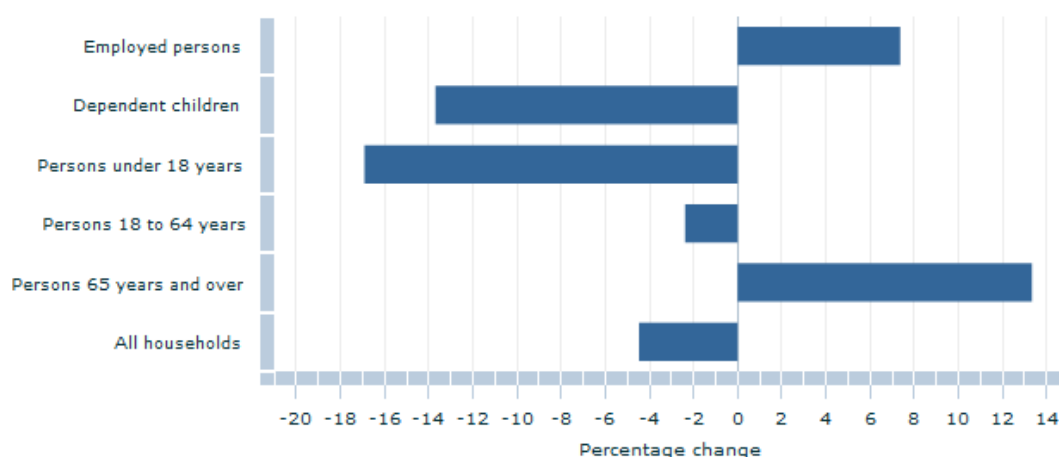
Demographic Changes

When analysing the distribution of household economic resources over long time periods, changes to the population's age profile, their sources of income and household composition can impact on wellbeing measures.

In the period from 1994–95 to 2011–12, average household size has fallen by 4% mainly due to a 14% fall in the average number of dependent children. In the same period the average number per household of persons 65 years and over, and of employed persons increased by 13% and 7%, respectively. (Graph 9)

The ABS has undertaken analysis of the impact of demographic changes on measures of income inequality and found that about one third of the total increase between 1994–95 and 2002–03 could be explained by demographic factors.

Graph 9. Average number of persons in household, % change 1994-95 to 2011-12



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Source(s): ABS Survey of Income and Housing (6523.0)

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KEY TERMS

CAPI/CATI – Computer assisted personal interview or computer assisted telephone interview (CATI)

Confidentialised unit record file (CURF) – a file containing micro data where the confidentiality of records is preserved using statistical techniques

Cross-National Equivalent File (CNEF) – a file containing equivalently defined variables for panel studies from several different countries

Cross-sectional survey – the sample for the survey is selected at a point in time

Deciles/Quintiles – groupings that result from ranking households by economic resource and then dividing the population into ten equal groups (deciles) or five equal groups (quintiles)

Disposable income – total income, monetary and in kind, less income tax, the Medicare levy and the Medicare levy surcharge

Equivalisation – a method of standardising the income, expenditure or wealth of households to take account of household size and composition differences

Household – a person living alone or a group of related or unrelated people who usually live in the same private dwelling

Imputed rent – allows more meaningful comparisons of the economic wellbeing of people living in different

housing tenures by imputing income based on the difference between market rent and actual housing costs for owner occupiers and subsidised private renters

Longitudinal survey – the same sample units are revisited for multiple survey periods allowing analyses of individuals over time

Social transfers in kind – goods and services provided to households free or at subsidised prices by governments e.g. for education, health, housing and child care

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FOR MORE INFORMATION

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About this Release

Provides estimates of income received by households, classified by various characteristics of the households and their residents (eg income quintile, principal source of household income, family composition, tenure type, age, employment status). This publication also includes, summary child care usage and cost information.

Low Economic Resource Households (Feature Article)

FEATURE ARTICLE LOW ECONOMIC RESOURCE HOUSEHOLDS

INTRODUCTION

People's material standard of living is reflected in their consumption of goods and services, such as food, clothing, housing, transport, medical care, leisure activities and so on. Access to economic resources,

household income and wealth, is key to understanding people's consumption possibilities. People living in households with low income and/or low wealth are more likely to experience reduced consumption possibilities, resulting in a lower material standard of living and greater risk of experiencing economic hardship.

This article examines the characteristics and economic circumstances of people living in households with low economic resources - low income, low wealth, and both low income and low wealth - using data from the 2011-12 Survey of Income and Housing (SIH).

ECONOMIC WELLBEING

Studies of personal and household economic wellbeing are often concerned with the extent of economic inequality in a society and how it is changing over time. In Australia, the government tax and transfer system acts to redistribute economic resources across the community. In addition, the social security system assists those in need to participate more fully in society, both economically and socially. For these reasons, the characteristics and economic circumstances of those in greatest need receive significant policy and research attention.

The key concepts relating to economic wellbeing are those dealing with income, consumption and wealth. They are generally concerned with describing the total economic value of the resources received, owned or consumed by people. Income can be used to purchase goods and services, or saved and invested to increase wealth. Since both income and wealth can be used to support consumption, economic wellbeing depends on the presence of both types of resources. It can therefore be misleading to assess people's relative economic wellbeing by using any one of the three concepts in isolation. For example, some people with low current incomes have considerable wealth, allowing them to maintain their consumption of goods and services at levels which would not be possible from their incomes alone.

In this article, household income and wealth measures have been equivalised using the same scale, in order to adjust for household size and composition and to maximise the comparability of the measures for the type of analysis undertaken.

HOUSEHOLD INCOME AND WEALTH

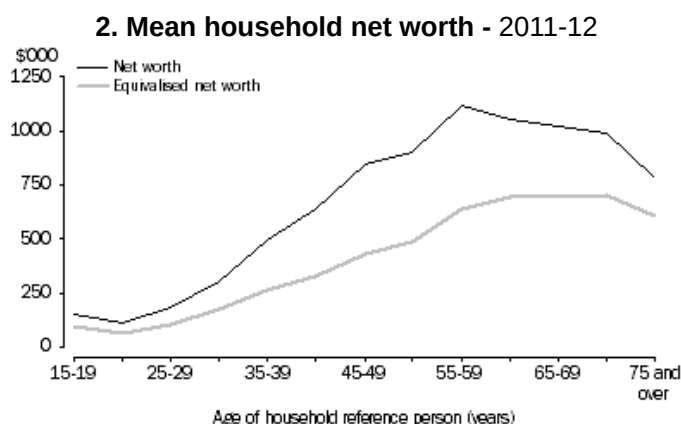
Income and wealth are closely interlinked. The more income a household has left after living expenses are met, the greater its capacity for building wealth, and the more wealth a household has, the greater its capacity to generate income. Notwithstanding these relationships, wealth is distributed between households differently to income.

Income levels vary considerably over a person's life cycle and are associated with two main factors. Firstly, labour force participation and the earning capacity of individuals increases with age, peaking at middle age, and declining in older age. Secondly, the growth in incomes until middle age are lower for females than for males, reflecting that women are more likely to work part-time or take breaks from employment due to family responsibilities (Graph 1).



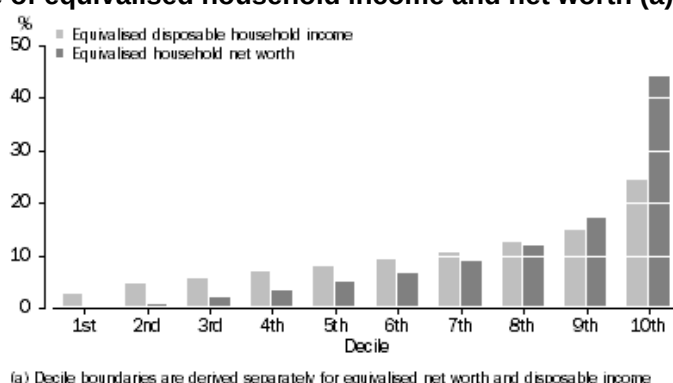
The distribution of wealth over the life cycle reflects the common pattern of wealth being gradually accumulated throughout the working lives of household members and then being utilised during retirement.

The age grouping with the highest mean net worth (\$1.1 million in 2011-12) was households where the reference person was between 55 and 59 years. Many of these people are nearing the end of their time in the labour force or have recently retired, that is, they are at the end of the main wealth accumulation period (Graph 2).



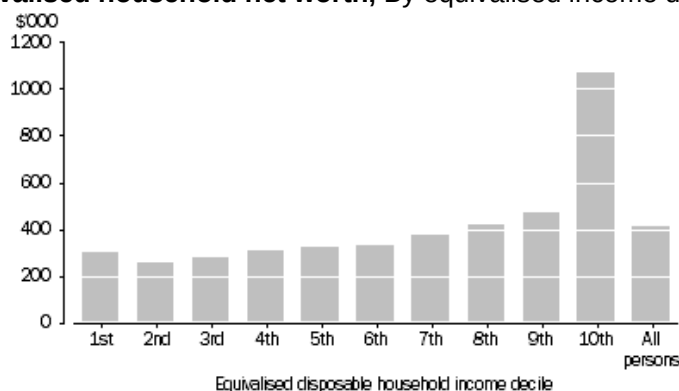
Household wealth is more unequally distributed than household income. People in the three lowest equivalised income deciles share 13% of all income, whilst people in the three lowest equivalised wealth deciles share only 3% of all wealth (Graph 3). People in the lowest equivalised household net worth decile had average equivalised wealth of \$8,000 compared to the population average of \$413,000 in 2011-12. Persons with low reserves of wealth to fall back on may face financial difficulty in times of need, such as during any period of reduced income or substantial unexpected expenses.

3. Share of equivalised household income and net worth (a) - 2011-12



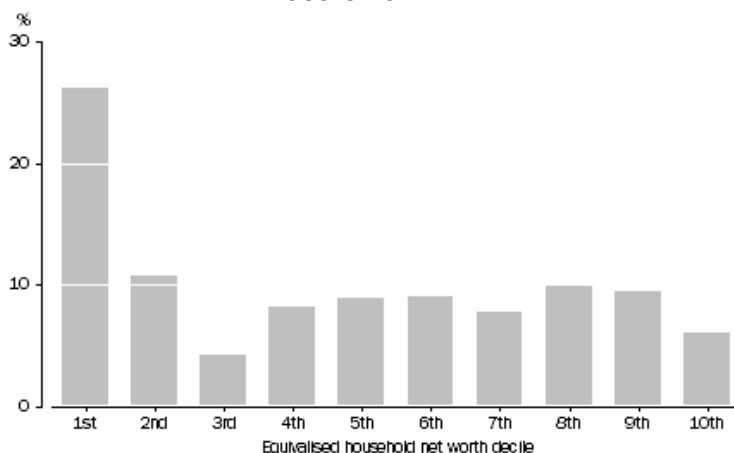
However, examining the net worth of households across the income distribution reveals some interesting results. Graph 4 compares the equivalised net worth of households by their equivalised disposable household income decile. It shows that the equivalised household net worth of persons in the first income decile was higher on average than the average equivalised household net worth of persons in the second and third deciles.

4. Mean equivalised household net worth, By equivalised income decile - 2011-12



Further, while just over a quarter of persons in the lowest income decile were also in the lowest net worth decile, substantial proportions were in much higher wealth deciles, including over 40% in the top five deciles (Graph 5). People with low income but high levels of net worth are unlikely to be at risk of experiencing economic hardship, despite their low current incomes.

5. Persons in lowest equivalised household disposable income decile, By equivalised net worth decile-2011-12



BROADER MEASURES

The income measures used so far in this article can be broadened further by:

- including the net imputed rent of owner occupiers and subsidised private renters, and
- bringing income and wealth characteristics together to obtain measures of people's consumption possibilities.

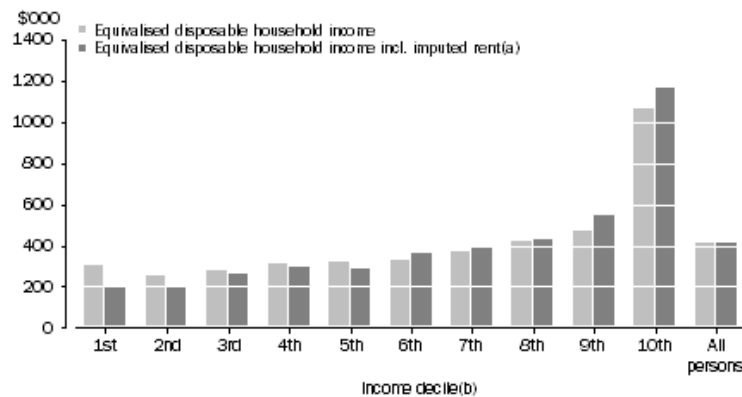
Imputed rent

Imputed rent is an estimate of the value of housing services that households receive from home ownership or by households paying subsidised private rent or occupying their home rent free. Imputed rent estimates have been available separately for each SIH cycle from 2003-04.

The inclusion of imputed rent in income allows the economic circumstances of home owners and renters to be more readily compared. Including imputed rent in the income measure (equivalised disposable household income, including imputed rent) generally results in home owners and subsidised renters moving up the income distribution relative to persons in other tenure and landlord types.

Graph 6 shows the effect of adding imputed rent to income on the relationship between income and net worth. Before imputed rent is added to income, persons in the lowest decile of equivalised disposable household income have an average equivalised household net worth higher than the next two deciles of income. However, when imputed rent is added to income, and the income deciles are recalculated based on the new measure, the equivalised household net worth of persons is lowest for people in the lowest two income deciles.

6. Mean Equivalised household net worth, By income decile - 2011-12



(a) Imputed rent excludes government subsidised housing, which is treated as a social transfer in kind
(b) Deciles are separately calculated for equivalised income and equivalised income including imputed rent

Table 7 illustrates the impact of including imputed rent on the characteristics of persons in the lowest income decile. In 2011-12, 71% of persons in the lowest decile of equivalised disposable household income were also in the lowest decile of equivalised disposable household income including imputed rent. Despite the overlap between the two groups, the reordering of people in the distribution with the inclusion of imputed rent results in a relatively lower average age (down from 57 to 50 years) and a significantly lower mean equivalised net worth (\$192,000 compared with \$300,000) for people in the lowest income decile.

Couple only households and lone person households where the reference person is 65 years and over decreased from 22% of the population in the lowest decile when using equivalised disposable household income as the income measure, to 10% when imputed rent is included.

7. LOWEST INCOME DECILE, Before and after including imputed rent (a) - 2011-12

Selected characteristics		Equivalised disposable household income	Equivalised disposable household income incl. imputed rent
Mean weekly household income			
Equivalised disposable household income \$		268	296
Equivalised disposable household income incl. imputed rent(a) \$		347	303
Mean equivalised household net worth	\$'000	300	192
Mean age of reference person	years	56.8	49.7
Owner without a mortgage	%	33.0	12.1
One parent family with dependent children	%	11.2	16.0
Couple only with dependent children	%	32.6	41.9
Lone person or couple, reference person aged 65 and over	%	22.3	10.0
Persons	'000	2 221	2 221

(a) Imputed rent excludes government subsidised housing which is treated as a social transfer in kind

Joint distributions

There are a number of ways to bring income and wealth data together to obtain measures of people's consumption possibilities. In this article, a **low economic resource** measure is used which includes people who are simultaneously in the lowest four deciles of both equivalised disposable household income (including private imputed rent) and equivalised household net worth. It therefore excludes from the population of interest people with either relatively high incomes or relatively high wealth, and as a result is more likely to correctly classify people most likely to be at risk of experiencing economic hardship compared to measures using income or wealth alone.

Low economic resource is a relative measure that classifies around 20% of the population to be in low income, low wealth households. The measure can be broadly contrasted with the 20% of the population in the low income and low wealth quintiles. However, the proportion of the population included in the **low economic resource** measure depends on the joint distribution of income and wealth, and may vary over time.

LOW ECONOMIC RESOURCE HOUSEHOLDS

Household characteristics

In 2011-12, there were 5 million people in **low economic resource** households, that is 22% of all persons (compared with the 4.4 million people, or 20% of all persons, included in each of the low income or the low wealth groups) (Table 8).

Low economic resource households have, on average, more household members and more members aged under 18 than either the low income or low wealth groups, or the population as a whole. One parent families with dependent children are significantly over-represented in all of the low resource groups, compared with the population as a whole.

People living in **low economic resource** households have, on average, considerably lower incomes and wealth than the population as a whole (this group receives 52% of the national average income and have 13% of the wealth). They are also more than twice as likely to have government pensions and allowances as their main source of household income (44% of persons in the group, compared to 19% for all persons).

The majority of **low economic resource** household are renters (68%) or owners with a mortgage (27%). Only 4% of **low economic resource** households own their own home without a mortgage since such households have net worth that puts them above the levels that would place them in the low wealth or **low economic resource** groups.

8. Persons in LOW ECONOMIC RESOURCE households, Selected characteristics - 2011-12

		Low income(a)	Low wealth(b)	Low economic resource(c)	All persons
PROPORTION OF PERSONS IN HOUSEHOLDS WITH CHARACTERISTICS					
Main source of household income					
Wage and salary	%	29.8	55.6	47.7	68.6
Own unincorporated business income	%	5.7	2.5	3.9	4.8
Government pensions and allowances	%	56.5	38.4	44.4	19.3
Other income	%	6.1	3.3	3.4	6.9
All persons(d)	%	100.0	100.0	100.0	100.0
Tenure and landlord type					
Owner without a mortgage	%	18.6	*0.5	3.5	25.5
Owner with a mortgage	%	30.5	5.6	26.5	43.3
Renters					
State/territory housing authority	%	12.4	13.9	12.6	3.2
Private landlord	%	34.7	73.8	52.1	25.2
Total renters(e)	%	49.4	91.1	67.7	29.4
All persons(f)	%	100.0	100.0	100.0	100.0
Family composition of household					
One family households					
Couple family with dependent children	%	42.2	33.4	45.8	42.1
One parent family with dependent children	%	14.9	19.3	17.9	6.9
Couple only	%	17.0	11.8	8.6	20.1
Other one family households	%	7.3	12.0	8.5	14.6
Multiple family households	%	3.2	3.1	4.6	3.5
Non-family households					
Lone person	%	13.6	11.0	10.3	9.5
Group households	%	1.8	9.4	4.3	3.3
All persons	%	100.0	100.0	100.0	100.0
HOUSEHOLD CHARACTERISTICS					
Mean weekly household income					
Equivalised disposable household income	\$	374	644	496	918
Equivalised disposable household income incl. imputed rent(g)	\$	398	655	501	970
Mean equivalised net worth	\$'000	193	22	54	413
Average age of reference person	years	52	41	45	50
Average number in household					
Employed persons	no.	0.6	1.1	0.8	1.3
Pension and allowance recipients	no.	1.2	0.9	1.1	0.7
Persons					
Under 18 years	no.	0.8	0.7	1.0	0.6
18 to 64 years	no.	1.3	1.7	1.6	1.6
65 years and over	no.	0.4	0.2	0.2	0.3

<i>Total</i>	no.	2.5	2.6	2.8	2.6
Estimated number in population					
Households	'000	1 802	1 738	1 802	8 630
Persons	'000	4 438	4 439	4 968	22 189

* estimate has a relative standard error of 25% to 50% and should be used with caution

(a) Persons in the lowest quintile of equivalised disposable household income (incl imputed rent)

(b) Persons in the lowest quintile of equivalised household net worth

(c) Persons in the lowest two quintiles of both equivalised disposable household income (incl imputed rent) and equivalised household net worth

(d) Includes households with nil or negative total income

(e) Includes other landlord types

(f) Includes other tenure types

(g) Imputed rent excludes government subsidised housing which is treated as a social transfer in kind

CHANGES OVER TIME

Table 9 compares the characteristics and circumstances of **low economic resource** households in respect of 2003-04, 2005-06, 2009-10 and 2011-12 (comprehensive wealth data was not collected in 2007-08).

Mean equivalised disposable household income including imputed rent, for persons in **low economic resource** households increased from \$399 per week in 2003-04 to \$501 in 2011-12, a \$102 or 26% increase in real income. Over the same time period, the average income for all persons increased by 29% (\$217), from \$753 to \$970 per week. The increases for both groups were statistically significant between these two time points.

In real terms, mean equivalised household net worth for persons in **low economic resource** households has remained about the same between 2003-04 and 2011-12. The gap in wealth between persons in **low economic resource** households and the average for persons in all households has increased slightly since 2003-04 but remained about the same between 2009-10 and 2011-12. The average equivalised household net worth for all persons was over seven times that of persons in **low economic resource** households in both 2009-10 and 2011-12, compared with six times in 2003-04.

9. PERSONS IN LOW ECONOMIC RESOURCE HOUSEHOLDS, Income and wealth - 2003-04 to 2011-12(a)

		LOW ECONOMIC RESOURCE(b)				ALL PERSONS			
		2003-04(c)	2005-06(c)	2009-10	2011-12	2003-04(c)	2005-06(c)	2009-10	2011-12
Mean weekly household income									
Equivalised disposable income	\$	389	422	473	496	710	779	891	918
Equivalised disposable income incl. imputed rent(d)	\$	399	424	476	501	753	905	948	970
Mean equivalised household net worth	\$'000	56	63	57	54	338	386	434	413
Estimated number in population									
Persons	'000	4 421	4 585	4 888	4 968	19 607	19 931	21 589	22 189
	%	23	23	23	22	100	100	100	100
Households	'000	1 613	1 713	1 699	1 802	7 736	7 926	8 399	8 630

(a) Adjusted to 2011-12 dollars using the Consumer Price Index

(b) Persons in the lowest two quintiles of both equivalised disposable household income (including imputed rent) and equivalised household net worth

(c) Estimate for 2003-04 and 2005-06 are not directly comparable with 2009-10 and 2011-12 due to the improvements made to measuring income introduced in the 2007-08 cycle. Estimates for 2003-04 and 2005-06 have been recompiled to reflect the new treatment of income, where data are available to support this calculation

(d) Imputed rent excludes government subsidised housing which is treated as a social transfer in kind

CONCLUSION

People living in **low economic resource** households are of particular policy and research interest because of their greater potential risk of experiencing economic hardship. This article has shown that a **low economic resource** measure, combining both low income and low wealth, provides a more accurate representation of the population potentially at risk, than can be achieved by simply using low income or low

wealth alone. However, there are many other factors that need to be considered in determining whether individual people are actually experiencing economic hardship. For example a person's income and wealth strongly relates to their life cycle stage and may not reflect future incomes or potential for wealth accumulation.

The income, but not wealth, of **low economic resource** households have increased since 2003-04, the first year available for comparison. However, the mean income and wealth measures for all persons between 2003-04 and 2011-12 grew more than for people in **low economic resource** households, resulting in a widening gap between the **low economic resource** group and the population average.

The SIH confidentialised unit record files (CURFs) provide considerable scope for more expansive analysis of **low economic resource** households, including additional cross-classification of households and use of more complex statistical procedures. Data about income and wealth were collected in the 2003-04, 2005-06, 2009-10 and 2011-12 SIH, allowing for analysis of the joint distribution of these measures, as well as the classification of households into the **low economic resource** group.

The importance of the joint measurement and analysis of income, consumption and wealth for understanding the economic wellbeing of people and households has been highlighted internationally with the recent release in June 2013 of the OECD Framework for Statistics on the Distribution of Household Income, Consumption and Wealth. This publication, which was prepared by an international expert group working under the auspices of the OECD, and led by the ABS, presents an internationally agreed framework to support the joint measurement and analysis of micro-level statistics on household income, consumption and wealth.

History of Changes

This document was added or updated on 16/08/2013.

12/11/2013 – This release contains the 'Household Economic Wellbeing' Fact Sheet Series, available in pdf format. The fact sheets provide a broad overview of the key concepts and data sources for measuring household economic wellbeing. They are available from the 'Downloads' tab.

29/08/2013 - This release includes detailed tables providing additional information to complement the Household Income and Income Distribution summary publication. Detailed tables on the value of social transfers in kind for sub-population groups are also available. The detailed tables are available from the 'Downloads' tab.

16/08/2013 - This release incorporates amendments to the rows presenting median gross household income in tables 7 to 17 in the publication and datacubes. This corrects an error identified with the calculation of these estimates in the initial publication release. Only median gross household income estimates for 2011-12 were affected, and all other published estimates remain the same.

Household incomes recovering after global financial crisis (Media Release)

MEDIA RELEASE

31 July 2013

Embargoed: 11.30 am Canberra Time

133/2013

Household incomes recovering after global financial crisis

Income in low and middle income households grew by over four per cent between 2009-10 and 2011-12, according to a report released today by the Australian Bureau of Statistics (ABS).

"Growth in household income stalled after the global financial crisis," said Stephanie Cornes, Director of Household Economic Resource Surveys at the ABS, "but figures from 2011-12 released today show that household incomes are recovering."

"Low income households have seen an increase of five per cent from 2009-10, and middle income households have seen an increase of four per cent. High income households have been fairly stable, with no significant growth."

"Overall, the share of total household income received by low and middle income households has grown since 2007-08, while the share received by high income households has fallen. These results are reflected in more equal incomes across Australian households since 2007-08," Ms Cornes said.

The ABS Survey of Income and Housing showed that in 2011-12 the average Australian household had a weekly disposable household income of \$918 and received their main income from wages and salaries.

- Low income households had an average weekly household income of \$475 and their main source of income was government pensions and allowances.
- Middle income households had an average weekly household income of \$793 and their main source of income was wages and salaries.
- High income households had an average weekly household income of \$1,814 and their main source of income was wages and salaries.

Ms Cornes said that "average household incomes in capital cities were 21 per cent above those outside metropolitan areas. Average incomes in the ACT, Western Australia and the Northern Territory were well above the national average, while Victoria, South Australia and Tasmania were below the national average."

Ms Cornes also said that "since the combination of income and wealth impact on material wellbeing, it will be important to also consider the detailed household wealth results which will be released in August 2013."

More details are available in the 2011-12 issue of *Household Income and Income Distribution, Australia* (cat. no. 6523.0) available for free download from the ABS website at www.abs.gov.au.

Media note:

Please ensure when reporting on ABS data that you attribute the Australian Bureau of Statistics (or ABS) as the source.

Average weekly disposable household income (or average weekly household income) is calculated after tax and adjusting for household size and composition, and historical estimates used for comparison are CPI adjusted.

Low income households are those in the second and third income deciles. Middle income households are those in the third income quintile. High income households are those in the highest income quintile.

Explanatory Notes

Explanatory Notes

EXPLANATORY NOTES

INTRODUCTION

1 This publication presents a summary of the findings from the 2011-12 Survey of Income and Housing (SIH). The survey collected detailed information about the income and household characteristics of persons aged 15 years and over resident in private dwellings throughout Australia.

2 The Survey of Income and Housing, User Guide, Australia, 2011-12 (cat. no. 6553.0), expected to be released in August 2013, will assist users in evaluating and interpreting results from this survey.

3 The SIH was conducted continuously from 1994-95 to 1997-98, and then in 1999-2000, 2000-01 and 2002-03. From 2003-04 the SIH has been conducted every two years. The 2011-12 SIH collected information from a sample of 14,569 households over the period July 2011 to June 2012.

4 Previous surveys of household income were conducted by the Australian Bureau of Statistics (ABS) in 1979, 1982, 1986 and 1990. These surveys were generally conducted over a two-month period, compared to a twelve-month period for the SIH. The SIH also included improvements to the survey weighting and estimation procedures, changes to the scope and coverage of household income and changes to interviewing methods.

5 In 2003-04 and 2009-10 the SIH was integrated with the Household Expenditure Survey (HES). In 2005-06, 2007-08 and 2011-12, the SIH was run as a stand alone survey, as it will be again in 2013-14.

CHANGES IN THIS ISSUE

6 Key changes to the 2011-12 SIH include:

- a decrease in fully responding sample size from 18,071 households in 2009-10 to 14,569 households in 2011-12. The expansion in the 2009-10 sample for an extra 4,200 households outside capital cities to support housing indicator reporting was maintained. The additional sample of metropolitan households whose main source of income was a government pension, benefit and/or allowance included in the 2009-10 SIH and HES samples to improve analysis for the Pensioner and Beneficiary Living Cost Index was not maintained
- an additional benchmark for the value of government benefit cash transfers used in 2009-10 was not required in 2011-12
- disability questions for persons aged 15 years and over were not asked in 2011-12, but will be collected in 2013-14
- Child Care Rebate (CCR) and Child Care Benefit (CCB) have been modelled to improve estimates of both the payment amounts and the number of households receiving assistance
- selected social transfers in kind variables have been modelled in 2011-12, and analysis included in Appendix 4 of this publication
- a feature article on Low Economic Resource households is included in this publication.

Changes to the survey sample

7 The expansion in the 2009-10 sample for an extra 4,200 households was maintained in the 2011-12 SIH. This additional sample of households outside capital cities better supports Council of Australian Governments (COAG) performance indicator reporting, particularly in regard to housing affordability and home ownership measures required under COAG intergovernmental agreements.

8 The additional sample of metropolitan households whose main source of income was a government pension, benefit and/or allowance included in the 2009-10 SIH and HES samples has not been maintained in the 2011-12 sample. The main purpose of this additional sample was to support improved analysis for the Pensioner and Beneficiary Living Cost Index (PBLCI).

Income measures

9 In 2007-08 the ABS revised its standards for household income statistics following the adoption of new international standards in 2004 and review of aspects of the collection and dissemination of income data. The income estimates from 2007-08 onwards apply the new income standards, and are not directly comparable with estimates for previous cycles.

10 To the extent possible, the estimates for 2003-04 and 2005-06 shown in the time series tables in this publication also reflect the new treatments.

11 For more detail on the nature and impact of the changes on the income data see Appendix 4 of **Household Income and Income Distribution, Australia, 2007-08** (cat. no. 6523.0).

Other changes

12 Errors in processing the 2009-10 income data have been corrected, resulting in an average decrease of \$1 for mean equivalised disposable household income across all households. This was reflected largely in a decrease of 0.04% in the mean equivalised disposable household income of households in the second and third deciles. The income estimates for 2009-10 shown in this publication have been revised. The second edition of the 2009-10 CURF includes the revised estimates.

CONCEPTS AND DEFINITIONS

13 The concepts and definitions relating to statistics of income are described in the following section. Other definitions are included in the glossary.

Person and household data

14 A major determinant of economic wellbeing for most people is the level of income they and other family members in the same household receive.

15 While income is usually received by individuals, it is normally shared between partners in a couple relationship and with dependent children. To a lesser extent, it may be shared with other children, other relatives and possibly other people living in the same household, for example through the provision of free or reduced accommodation costs. This is particularly likely to be the case for children other than dependants and other relatives with low levels of income of their own. Even when there is no transfer of income between members of a household, nor provision of free or reduced accommodation costs, members are still likely to benefit from the economies of scale that arise from the sharing of dwellings.

16 Household characteristics, including household income, are therefore the main information required for analysing income distribution. However, it is the number of people who belong to households with particular characteristics, rather than the number of households with those characteristics, that is of primary interest in measuring income distribution and leads to the preference for the equal representation of those persons in such analysis. For example, if the person is used as the unit of analysis rather than the household, then the representation in the income distribution of each person in a household comprising four persons is the same as that for each person in a household comprising two persons. In contrast, if the household were to be used as the unit of analysis, each person in the four person household would only have half the representation of each person in the two person household.

17 In this publication, the income distribution measures are all calculated with respect to persons, including children. Such measures are sometimes known as person weighted estimates. They are described in more detail in Appendix 1. Nevertheless, as most of the relevant characteristics of persons relate to their household circumstances, Tables 6 to 17 primarily describe the households to which people belong.

Income

18 Household income consists of all current receipts, whether monetary or in kind, that are received by the household or by individual members of the household, and which are available for, or intended to support, current consumption.

19 Income includes receipts from:

- wages and salaries and other receipts from employment (whether from an employer or own incorporated enterprise), including income provided as part of salary sacrifice and/or salary package arrangements
- profit/loss from own unincorporated business (including partnerships)
- net investment income (interest, rent, dividends, royalties)
- government pensions and allowances
- private transfers (e.g. superannuation, workers' compensation, income from annuities, child support, and financial support received from family members not living in the same household).

20 Receipts of family tax benefit are treated as income, regardless of whether they are received fortnightly or as a lump sum. The aged persons' savings bonus and self-funded retirees' supplementary bonus, paid as part of the introduction of The New Tax System in 2000-01 are regarded as capital transfers as they

were designed to help retired people maintain the value of their savings and investments following the introduction of the GST. However, the one-off payment to older Australians paid in 2000-01, 2005-06 and 2007-08, the one-off payment to families paid since 2003-04, and the one-off payments to carers paid since 2003-04, are included as income as they were primarily a supplement to existing income support payments. The maternity payment introduced in July 2004, now referred to as the Baby Bonus, and the Paid Parental Leave payment are also included as income.

21 The one-off Clean Energy Advance payment paid in May 2012 and June 2012 is also included as income. This one-off payment was paid to pensioners, other income support recipients, families receiving Family Tax Benefit payments and Senior Supplement recipients, provided they met eligibility requirements.

22 Also included as income is the one-off Education Tax Refund that was paid to eligible families in June 2012. This one-off payment was made payable to families receiving Family Tax Benefit Part A, plus young people in school receiving Youth Allowance and some other income support and veterans' payments, providing they met the age and education requirements.

Gross income

23 Gross income is the sum of the income from all sources before income tax and the Medicare levy have been deducted. Prior to 2005-06 family tax benefit paid through the tax system or as a lump sum was excluded from gross income for practical reasons but deducted in deriving disposable income. Since 2005-06 these payments have been included in gross income.

Disposable income

24 Disposable income better represents the economic resources available to meet the needs of households. It is derived by deducting estimates of personal income tax and the Medicare levy from gross income. Medicare levy surcharge was also calculated and deducted from gross income while calculating disposable income (as it was for the first time in 2007-08).

25 Income tax is estimated for all households using taxation criteria for 2011-12 and the income and other characteristics of household members reported in the survey.

26 Prior to 2005-06 the derivation of disposable income also included the addition of family tax benefit paid through the tax system or as a lump sum by Centrelink since for practical reasons it was not included in the gross income estimates.

Equivalised disposable income

27 Most analyses in this publication use equivalised disposable household income rather than gross or disposable income since it enables comparison of the relative economic wellbeing of households of different size and composition. Equivalised disposable household income is calculated by adjusting disposable income by the application of an equivalence scale. This adjustment reflects the requirement for a larger household to have a higher level of income to achieve the same standard of living as a smaller household. Where disposable income is negative, it is set to zero equivalised disposable income.

28 When household income is adjusted according to an equivalence scale, the equivalised income can be viewed as an indicator of the economic resources available to a standardised household. For a lone person household, it is equal to income received. For a household comprising more than one person, equivalised income is an indicator of the household income that would be required by a lone person household in order to enjoy the same level of economic wellbeing as the household in question.

29 For more information on equivalised income see Appendix 3.

Lowest income decile

30 While equivalised income generally provides a useful indicator of economic wellbeing, there are some circumstances which present particular difficulties. Some households report extremely low and even negative income in the survey, which places them well below the safety net of income support provided by

government pensions and allowances. Households may under report their incomes in the survey at all income levels, including low income households. However, households can correctly report low levels of income if they incur losses in their unincorporated business or have negative returns from their other investments.

31 Studies of income and expenditure reported in HES surveys have shown that such households in the bottom income decile and with negative gross incomes tend to have expenditure levels that are comparable to those of households with higher income levels (and slightly above the average expenditures recorded for the fifth income decile). This suggests that these households have access to economic resources such as wealth, or that the instance of low or negative income is temporary, perhaps reflecting business or investment start up. Other households in the lowest income decile in past surveys had average incomes at about the level of the single pension rate, were predominantly single person households, and their main source of income was largely government pensions and allowances. However, on average, these households also had expenditures above the average of the households in the second income decile, which is not inconsistent with the use of assets to maintain a higher standard of living than implied by their incomes alone.

32 It can therefore be reasonably concluded that many of the households included in the lowest income decile are unlikely to be suffering extremely low levels of economic wellbeing. Income distribution analysis may lead to inappropriate conclusions if such households are used as the basis for assessing low levels of economic wellbeing. For this reason, tables showing statistics classified by income quintiles include a supplementary category comprising the second and third income deciles, which can be used as an alternative to the lowest income quintile. (For an explanation of quintiles and deciles, see Appendix 1.)

33 Whenever a HES is conducted, analysis of households in the lowest income decile can be improved through direct observation of the expenditure and net worth of these households. An examination of the characteristics and economic circumstances of people living in households with low economic resources from 2009-10 HIES is included in the feature article in **Household Wealth and Wealth Distribution, Australia, 2009-10** (cat. no. 6554.0).

34 Although expenditure data was not collected in SIH 2011-12, analysis on people living in households with low economic resources such as low income, low wealth is provided in the feature article in this publication.

Current income

35 Income is collected using a number of different reporting periods, such as the whole financial year for own unincorporated business and investment income, and the usual payment for a period close to the time of interview for wages and salaries, other sources of private income and government pensions and allowances. The income reported is divided by the number of weeks in the reporting period. Estimates of weekly income in this publication do not therefore refer to a given week within the reference period of the survey.

Annual income

36 The tables in the main body of this publication refer to 'current' weekly income, that is, income being received at the time the data were collected from respondents. The survey also produces measures of 'annual' income that reflect total incomes for the previous financial year. Appendix 2 explains how current income differs from annual income, notes some of the advantages and disadvantages of the two types of measure and presents some 'annual' income estimates.

Imputed rent

37 In May 2008 the ABS released household level estimates of imputed rent, derived from data reported in the 2003-04 and 2005-06 SIH for the first time (**Experimental Estimates of Imputed Rent, Australia, 2003-04 and 2005-06** (cat. no. 6525.0)). The availability of imputed rent estimates allows the analysis of household income to be extended to include the imputed rental incomes that flow to people living in homes owned by the occupant and those paying subsidised rent.

38 Such imputations allow for more meaningful comparison of the income circumstances of people living in

different tenure types, and to understand changes over time in income levels and the distribution of income when tenures may be changing over time. Including imputed rent as part of household income and expenditure conceptually treats owner-occupiers as if they were renting their home from themselves, thus simultaneously incurring rental expenditure and earning rental income. Imputed rent is included in income on a net basis i.e. the imputed value of the services received less the value of the housing costs incurred by the household in their role as a landlord.

39 Hedonic regression is used to estimate the market value of the rental equivalent of an owner-occupied dwelling. Data from the SIH on reported rents paid by private market renters is regressed on the characteristics of their rented dwellings e.g. location and dwelling structure. The estimated coefficients are then applied to the corresponding characteristics of owner-occupied and other dwellings to produce imputed values of the gross rental equivalence for these dwellings.

40 Net imputed rent is estimated as gross imputed rent less reported housing costs. For owner occupiers, the housing costs subtracted are those which would normally be paid by landlords i.e. rates, mortgage interest, insurance, repairs and maintenance. For households paying subsidised rent (e.g. tenants of an employer or of a state/territory housing authority) and households occupying their dwelling rent-free, the housing costs that are subtracted are largely made up of the reported rent paid, but other housing costs incurred, such as rates, are also subtracted for some tenure types. In the case of tenants of state/territory housing authorities, the net imputed rent estimates have been benchmarked to administrative data on the mean weekly rental subsidy.

Child care payments

41 Child Care Benefit (CCB) is a payment from the Australian Government that assists families with the costs of registered or approved child care. The scheme is means-tested and allocates an hourly amount that can either be remitted to child care consumers after child care has been paid, or child care organisations can receive the CCB from the Government, therefore reducing the child care fees payable by the amount of the benefit.

42 Child Care Rebate (CCR) is also an Australian Government payment that, like CCB, assists families with the cost of child care. Unlike CCB, it is not a fixed hourly rate, but a refund of 50% of child care costs (after any rebates like CCB), up to a per child, per year limit (\$7,500 per child per year in 2011-12). Families are eligible for CCB for up to 50 hours a week per child. Although certain requirements must be met to qualify for CCR, the eligibility tests are different from those for the CCB.

43 Estimates of CCB and CCR are collected from the child care questions, however there has been a significant gap between the reported number of households receiving assistance and the total value of that assistance, compared to administrative records. In SIH 2011-12, CCB and CCR have been modelled to improve the estimates of these payments. Child care assistance is conceptually treated as social transfers in kind, including administrative overhead as part of the value of the transfer.

Social transfers in kind

44 Social transfers in kind consist of goods and services provided free or at subsidised prices by the government. The allocation of social transfers in kind presented in this publication is restricted to government expenditure that is relatable to particular types of households. Information reported in the 2011-12 SIH was used as the basis for allocating social transfers in kind for the provision of education, health, housing, child care, electricity concessions and other social security and welfare services.

45 The total value of social transfers in kind was defined as Commonwealth, state or territory and local government expenses, net of intra-government transfers, minus government pensions and allowances paid in cash minus government revenue from the sale of goods and services.

46 Appendix 4 provides estimates of social transfers in kind and outlines the methodologies used to allocate the social transfers in kind to individual households in 2011-12. A data cube will be published on the ABS web site in August 2013 that contains detailed social transfers in kind allocations for subpopulations.

Net worth

47 Net worth, often referred to as wealth, is the value of a household's assets less the value of its liabilities. Assets can take many forms including:

- produced tangible fixed assets that are used repeatedly and for more than one year, such as dwellings and their contents, vehicles, and machinery and equipment used in businesses owned by households
- intangible fixed assets such as computer software and artistic originals
- business inventories of goods
- non-produced assets such as land
- financial assets such as bank deposits, shares, superannuation account balances, and the outstanding value of loans made to other households or businesses.

48 Liabilities are primarily the value of loans outstanding including:

- credit card debt
- mortgages
- investment loans
- borrowings from other households
- debt on other loans such as personal loans to purchase vehicles, and study loans.

49 In the 2011-12 SIH, some asset and liability data were collected on a net basis rather than collecting for each component listed above. In particular, if a survey respondent owned or part owned a business, they were asked how much they would receive if they sold their share of the business and paid off any outstanding debts.

50 While this publication provides some household net worth statistics, principally to aid income analysis, a more comprehensive range of household asset and liability information will be released in August 2013 in Household Wealth and Wealth Distribution, Australia, 2011-12 (cat. no. 6554.0).

SURVEY METHODOLOGY

Scope

51 The survey collects information by personal interview from usual residents of private dwellings in urban and rural areas of Australia (excluding very remote areas), covering about 97% of the people living in Australia. Private dwellings are houses, flats, home units, caravans, garages, tents and other structures that were used as places of residence at the time of interview. Long-stay caravan parks are also included. These are distinct from non-private dwellings which include hotels, boarding schools, boarding houses and institutions. Residents of non-private dwellings are excluded.

52 Usual residents excludes:

- households which contain members of non-Australian defence forces stationed in Australia
- households which contain diplomatic personnel of overseas governments
- households in collection districts defined as very remote - this has only a minor impact on aggregate estimates except in the Northern Territory where such households account for about 23% of the population.

Data collection

53 Information for each household was collected using:

- a household level computer assisted interview questionnaire which collected information on household characteristics
- an individual level computer assisted interview questionnaire which collected information on income, wealth, childcare costs and other personal characteristics from each usual resident aged 15 years and over.

54 Sample copies of the above documents are included in the Survey of Income and Housing, User Guide, Australia, 2011-12 (cat. no. 6553.0), expected to be released in August 2013.

Sample design

55 The sample was designed to produce reliable estimates for broad aggregates for households resident in private dwellings aggregated for Australia, for each state and for the capital cities in each state and territory. More detailed estimates should be used with caution, especially for Tasmania, the Northern Territory and the Australian Capital Territory (see Appendix 5).

56 For the 2011-12 SIH, dwellings were selected through a stratified, multistage cluster design from the private dwelling framework of the ABS Population Survey Master Sample. Selections were distributed across a twelve month enumeration period so that the survey results are representative of income patterns across the year.

Non-responding households

57 Of the selected dwellings there were 18,298 households in the scope of the survey. Of these, 3,729 did not respond at all to the questionnaire, or did not respond adequately. Of these 3,729 households, 49% were not able to be contacted during the survey enumeration and 32% were contacted but either refused to respond or were not able to respond. The remainder of these households included:

- households affected by death or illness of a household member
- households in which the significant person(s) in the household did not respond because they had language problems or refused to participate.
- households in which the significant person(s) did not respond to key questions.

Partial response and imputation

58 Some households did not supply all the required information but supplied sufficient information to be retained in the sample. Such partial response occurs when:

- income or other data in a questionnaire are missing from one or more non-significant person's records because they are unable or unwilling to provide the data
- all key questions are answered by the significant person(s) but other data are missing
- not every person aged 15 years or over residing in the household responds but the significant person(s) provide answers to all key questions.

59 In the first two cases, the data provided are retained and the missing data are imputed by replacing each missing value with a value reported by another person (referred to as the donor).

60 For the third type of partial response, the data for the persons who did respond are retained, and data for each missing person are provided by imputing data values equivalent to those of a fully responding person (the donor).

61 Donor records are selected by finding fully responding persons with matching information on various characteristics (such as state, sex, age, labour force status and income) as the person with missing information. As far as possible, the imputed information is an appropriate proxy for the information that is missing. Depending on which values are to be imputed, donors are randomly chosen from the pool of individual records with complete information for the block of questions where the missing information occurs.

62 The final sample includes 5,850 households which had at least one imputed value. For 29.4% of these households only a single value was missing, and most of these were for income from superannuation or interest and investments.

Final sample

63 The final sample on which estimates were based is composed of persons for which all necessary information is available. The information may have been wholly provided at the interview (fully-responding) or may have been completed through imputation for partially responding households. Of the selected dwellings, there were 18,298 in the scope of the survey, of which 14,569 (80%) were included as part of the final estimates.

64 Table

SIH FINAL SAMPLE: NUMBER OF HOUSEHOLDS - 2011-12

	CAPITAL CITY		BALANCE OF STATE		TOTAL	
	Households no.	Persons no.	Households no.	Persons no.	Households no.	Persons no.
NSW	1 512	3 974	946	2 163	2 458	6 137
Vic.	1 389	3 503	1 127	2 603	2 516	6 106
Qld	995	2 515	984	2 405	1 979	4 920
SA	1 212	2 866	1 115	2 487	2 327	5 353
WA	1 060	2 585	1 239	3 057	2 299	5 642
Tas.	549	1 287	1 040	2 401	1 589	3 688
NT	462	1 158	70	165	532	1 323
ACT	869	2 165	-	-	869	2 165
Aust.	8 048	20 053	6 521	15 281	14 569	35 334

- nil or rounded to zero (including null cells)

Weighting

65 Weighting is the process of adjusting results from a sample survey to infer results for the total in scope population whether that be persons or households. To do this, a 'weight' is allocated to each sample unit (e.g. a person or a household). The weight is a value which indicates how many population units are represented by the sample unit. The first step in calculating weights for each unit is to assign an initial weight, which is the inverse of the probability of being selected in the survey. For example, if the probability of a household being selected in the survey was 1 in 600, then the household would have an initial weight of 600 (that is, it represents 600 households).

66 An adjustment is then made to the initial weights to ensure that seasonal variation is appropriately represented in survey estimates. After this initial adjustment, the sum of the weights of households in each quarter is in proportion to the length of the quarter (which align across the financial year with pension indexation dates rather than calendar quarters).

67 The initial weights are then calibrated to align with independent estimates of the population of interest, referred to as 'benchmarks'. Weights calibrated against population benchmarks ensure that the survey estimates conform to the independently estimated distribution of the population rather than to the distribution within the sample itself.

68 Most of the independent person and household benchmarks are based on demography estimates of numbers of persons and households in Australia. The benchmarks are adjusted to include persons and households residing in private dwellings only and to exclude persons living in very remote areas, and therefore do not, and are not intended to, match estimates of the Australian resident population published in other ABS publications. The demography estimates of persons (estimated resident population - ERP) and households used in SIH 2011-12 are built up from the 2006 Census.

69 In the 2011-12 SIH, as in 2007-08 and 2009-10, all persons in each household were assigned a weight. This differs from the 2005-06 SIH where children aged 0-14 years were not given separate weights, but household counts of the number of children were benchmarked to population totals.

70 The benchmarks used in the calibration of the final weights for the 2011-12 SIH were:

- number of persons -
 - by state or territory by age by sex
 - in five year age groups up to 80+ years for all states and territories (excluding NT)
 - in five year age groups up to 70+ years for the NT
 - by state or territory by labour force status ('Employed', 'Unemployed' and 'Not in the labour

- force': 'Employed' and 'Unemployed' combined for NT)
- by state by capital city/balance of state (excluding NT and ACT which use only state)
- numbers of households -
 - by household composition (number of adults (1,2 or 3+) and whether or not the household contains children) (excluding NT which uses only number of adults of 1+).

Estimation

71 Estimates produced from the survey are usually in the form of averages (e.g. average weekly income of couple households with dependent children), or counts (e.g. total number of households that own their dwelling or total number of persons living in households that own their own dwelling). For counts of households, the estimate was obtained by summing the weights for the responding households in the required group (e.g. those owning their own dwelling). For counts of persons, the household weights were multiplied by the number of persons in the household before summing. The SIH collects data on the number of people, including children, in each household but separate records with income and most detailed data were only collected for people 15 years and older.

72 Average income values are obtained in two different ways, depending on whether mean gross household income or mean equivalised disposable household income is being derived. Estimates of mean gross household income are calculated on a household weighted basis. They are obtained by multiplying the gross income of each household by the weight of the household, summing across all households and then dividing by the estimated number of households. For example, the mean gross household income of couple households with dependent children is the weighted sum of the gross income of each such household divided by the estimated number of those households.

73 Estimates of mean equivalised disposable household income are calculated on a person weighted basis. They are obtained by multiplying the equivalised disposable income of each household by the number of people in the household (including children) and by the weight of the household, summing across all households and then dividing by the estimated number of people in the population group. Appendix 3 illustrates the differences between mean gross household income calculated on a household weighted basis and mean equivalised disposable household income calculated on a person weighted basis.

RELIABILITY OF ESTIMATES

74 The estimates provided in this publication are subject to two types of error, non-sampling and sampling error.

Non-sampling error

75 Non-sampling error can occur in any collection, whether the estimates are derived from a sample or from a complete collection such as a census. Sources of non-sampling error include non-response, errors in reporting by respondents or recording of answers by interviewers and errors in coding and processing the data.

76 Non-sampling errors are difficult to quantify in any collection. However, every effort is made to reduce non-sampling error to a minimum by careful design and testing of the questionnaire, training of interviewers and data entry staff and editing and quality control procedures during data processing.

77 One of the main sources of non-sampling error is non-response by persons selected in the survey. Non-response occurs when people cannot or will not cooperate or cannot be contacted. Non-response can affect the reliability of results and can introduce a bias. The magnitude of any bias depends upon the level of non-response and the extent of the difference between the characteristics of those people who responded to the survey and those who did not.

78 The following methods were adopted to reduce the level and impact of non-response:

- Primary Approach Letters (PALs) were posted to selected SIH households prior to enumeration
- document cards were provided to respondents to suggest having financial statements and similar documents handy at the time of interview to assist with accurate responses
- face-to-face interviews with respondents

- the use of interviewers who could speak languages other than English, where necessary
- Proxy Interviews conducted when consent is given, with a responsible person answering on behalf of a respondent incapable of doing so themselves
- follow-up of respondents if there was initially no response
- imputation of missing values
- ensuring that the weighted data is representative of the population (in terms of demographic characteristics) by aligning the estimates with population benchmarks.

Sampling error

79 The estimates are based on a sample of possible observations and are subject to sampling variability. The estimates may therefore differ from the figures that would have been produced if information had been collected for all households. A measure of the sampling error for a given estimate is provided by the standard error, which may be expressed as a percentage of the estimate (relative standard error). Further information on sampling error is given in Appendix 5.

ACKNOWLEDGMENT

80 ABS publications draw extensively on information provided freely by individuals, businesses, governments and other organisations. Their continued cooperation is very much appreciated: without it, the wide range of statistics published by the ABS would not be available. Information received by the ABS is treated in strict confidence as required by the **Census and Statistics Act 1905**.

SPECIAL DATA SERVICES

81 The ABS offers specialist consultancy services to assist clients with more complex statistical information needs. Clients may wish to have the unit record data analysed according to their own needs, or require tailored tables incorporating data items and populations as requested by them. Tables and other analytical outputs can be made available electronically or in printed form. However, as the level of detail or disaggregation increases with detailed requests, the number of contributors to data cells decreases. This may result in some requested information not being able to be released due to confidentiality or sampling variability constraints. All specialist consultancy services attract a service charge, and clients will be provided with a quote before information is supplied. For further information, contact ABS information consultants on 1300 135 070 from 9:00am to 4:30pm AEST Monday to Friday (International callers +61292684909).

UNIT RECORD FILE

82 A basic confidentialised unit record file (CURF) from the 2011-12 SIH will be released on CD-ROM in August 2013. A more detailed (expanded) SIH CURF will also be available through the ABS Remote Access Data Laboratory. All clients wishing to access the SIH 2011-12 basic and expanded CURFs should refer to the How to Apply for Microdata web page. Clients should familiarise themselves with the User Manual: Responsible Use of ABS CURFs and other related microdata information which are available via the Microdata web pages, before applying for access through MiCRO.

Australian universities

83 The ABS/Universities Australia Agreement provides participating universities with access to a range of ABS products and services. This includes access to CURF data. For further information, university clients should refer to the ABS/Universities Australia Agreement web page.

Other clients

84 The Microdata Entry page on the ABS website contains links to microdata related information to assist users to understand and access microdata. For further information users should contact the microdata access team by email: microdata.access@abs.gov.au or telephone (02) 6252 7714

USER GUIDE

85 The User Guide includes information about the purpose of the survey, the concepts and contents, and the methods and procedures used to collect the data and derive the estimates. It also outlines the differences between the 2011-12 survey and earlier SIH surveys. Its purpose is to help users of the data understand the nature of the survey, and its potential to meet user needs. It also contains information for users of the SIH confidentialised unit record files (CURFs). The 2011-12 User Guide is expected to be released in August 2013.

RELATED PRODUCTS

86 In addition to this publication, users may wish to refer to the following ABS products which relate to income. All publications can be downloaded free of charge from the ABS website, and are expected to be released in August 2013.

Survey of Income and Housing, User Guide, Australia, 2011-12 (cat. no. 6553.0)
Microdata: Survey of Income and Housing - Australia, 2011-12 (cat. no. 6541.0.30.001)
Housing Occupancy and Costs, Australia, 2011-12 (cat. no. 4130.0)
Household Wealth and Wealth Distribution, Australia 2011-12 (cat. no. 6554.0)

87 Earlier products relating to the SIH are listed below. All publications can be downloaded free of charge from the ABS website.

Household Expenditure Survey and Survey of Income and Housing, User Guide, Australia, 2009-10 (cat. no. 6530.0)
Microdata: Household Expenditure Survey and Survey of Income and Housing, Australia, 2009-10 (Second edition - incl. Fiscal Incidence Study) (cat. no. 6540.0)
Household Expenditure Survey, Australia: Summary of Results, 2009-10 (cat. no. 6530.0)
Government Benefits, Taxes and Household Income, Australia 2009-10 (cat. no. 6537.0)
Experimental Estimates of Imputed Rent, Australia, 2003-04 and 2005-06 (cat. no. 6525.0)
Estimates of Personal Income for Small Areas, Time Series, 2009-10 (cat. no. 6524.0.55.002)
Household Expenditure Survey, Detailed Expenditure Items, 2003-04 (cat. no. 6535.0.55.001)
Housing Mobility and Conditions, Australia, 2007-08 (cat. no. 4130.0.55.002)

88 Other ABS publications relevant to income statistics are listed below. These publications can also be downloaded free of charge from the ABS website.

Labour Force, Australia (cat. no. 6202.0) - monthly
Average Weekly Earnings, Australia (cat. no. 6302.0) - quarterly
Measuring Wellbeing: Frameworks for Australian Social Statistics, 2001 (cat. no. 4160.0)
Measures of Australia's Progress, 2010 (cat. no. 1370.0)
Information paper: Changes to ABS Measures of Employee Remuneration, Australia, 2006 (cat. no. 6313.0)
Standards for Income Variables, 2010 (cat. no. 1287.0) - this is only available electronically and cannot be downloaded.

89 Users may also wish to refer to the following non-ABS products which relate to income.

Taxation Statistics 2010-11: A summary of income tax returns for the 2010-11 income year and other reported tax information for the 2011-12 financial year (Australian Tax Office) link: under > Corporate > Our statistics centre > Taxation Statistics <www.ato.gov.au>
Statistical Paper No. 10: Income support customers: A statistical overview 2011 (Department of Families, Community Services and Indigenous Affairs) link: under FaHCSIA Internet > About FaHCSIA > Publications & Articles > Research Publications > Statistical Paper series<www.fahcsia.gov.au/about/publicationsarticles/research/statistical/Pages/default.aspx>

Glossary

GLOSSARY

Balance of state

That part of each Australian state or territory not defined as capital city. Balance of state estimates for Northern Territory are regarded as too unreliable to publish separately since they exclude collection districts defined as very remote which account for about 23% of the NT population. All of the Australian Capital Territory is defined as capital city for this publication.

Capital city

Refers to Australia's six state capital city Statistical Divisions and the Darwin Statistical Division as defined in the Australian Standard Geographical Classification (ASGC) (cat. no. 1216.0). For the Australian Capital Territory the estimates relate predominantly to urban areas, and all of the Australian Capital Territory is defined as a capital city for this publication.

Child Care Benefit (CCB)

Assistance in the form of a payment made by the Australian Government to help with the costs of child care for families who use either approved or registered child care. The scheme is means-tested and families can either receive Child Care Benefit (CCB) as a lump sum payment, or as reduced child care fees.

Child Care Rebate (CCR)

Child Care Rebate (CCR) covers 50 per cent of out-of-pocket child-care expenses, up to a maximum amount per child per year. The CCR is available for families who qualify for Child Care Benefit (CCB) and meet a work, study and training test.

Collection District (CD)

The Census Collection District (CD) is the smallest geographic area defined in the Australian Standard Geographical Classification (ASGC) (cat. no. 1216.0).

Commonwealth Rent Assistance (CRA)

Commonwealth Rent Assistance is a non-taxable income supplement paid through Centrelink to individuals and families who rent in the private rental market. It is only paid to recipients of another government benefit or pension, and paid in conjunction with that other benefit.

Consumer Price Index (CPI)

A general measure of price inflation for the household sector in Australia. Specifically, it provides a measure of changes, over time, in the cost of a constant basket of goods and services acquired by the capital city households in Australia.

Cost of child care

The cost, gross of Child Care Benefit and the Child Care Rebate, to parents for a child to attend care. In most cases, where the Child Care Benefit was paid directly to the child care service provider, the cost of care was directly collected in the survey. In a small number of cases, where the Child Care Benefit was not paid directly to the provider, the Child Care Benefit was estimated.

Couple

See One family households.

Couple family with dependent children

See One family households.

Credit card debt

The amount owing on the respondent's latest credit card account statement (including any government,

interest or financial institution charges), irrespective of whether it was paid off by the due date. Includes amounts owing on specialised retail shopping cards as well as general credit cards such as Visa, Mastercard and store credit cards but excludes Visa and Mastercard debit cards.

Debenture

A formal acknowledgement of indebtedness by a company. Interest is paid by the company at specific intervals. A loan or deposit can be called a debenture if it is secured over company assets. Unlike shareholders, debenture holders have a creditor relationship with the company. Instead of dividends, debenture holders receive interest on their debentures which is accounted for by the company as an expense.

Deciles

Groupings that result from ranking all households or persons in the population in ascending order according to some characteristic such as their household income and then dividing the population into 10 equal groups, each comprising 10% of the estimated population.

Dependent children

All persons aged under 15 years; and persons aged 15-24 years who are full-time students, have a parent in the household and do not have a partner or child of their own in the household.

Disposable income

Gross income less income tax, the Medicare levy and the Medicare levy surcharge i.e. remaining income after taxes are deducted, which is available to support consumption and/or saving. Income tax, Medicare levy and the Medicare levy surcharge are imputed based on each person's income and other characteristics as reported in the survey. Disposable income is sometimes referred to as net income.

Employed

Persons aged 15 years and over who, during the week before the interview:

- worked one hour or more for pay, profit, commission or payment in kind in a job or business, or on a farm (includes employees, employers and own account workers)
- worked one hour or more, without pay, in a family business or on a family farm
- had a job, business or farm but was not at work because of holidays, sickness or other reason.

Employee

An employed person who, for most of his/her working hours:

- works for a public or private employer and receives remuneration in wages or salary, or is paid a retainer fee by his/her employer and works on a commission basis, or works for an employer for tips, piece-rates or payment in kind
- operates their own incorporated business with or without employees.

Employer

A person who operates his or her own unincorporated business or engages independently in a profession or trade, and hires one or more employees.

Employment income

See Wages and salaries.

Equivalised disposable household income

Disposable household income adjusted using an equivalence scale. For a lone person household it is equal to disposable household income. For a household comprising more than one person, it is an indicator of the disposable household income that would need to be received by a lone person household to enjoy the

same level of economic wellbeing as the household in question. For further information see Appendix 3.

Family

Two or more people, one of whom is at least 15 years of age, who are related by blood, marriage (registered or de facto), adoption, step or fostering and who usually live in the same household. A separate family is formed for each married couple, or for each set of parent-child relationships where only one parent is present.

Family composition of household

Classifies households into three broad groupings based on the number of families present (one family, multiple family and non-family). One family households are further disaggregated according to the type of family (such as couple family or one parent family) and according to whether or not dependent children are present. Non-family households are disaggregated into lone person households and group households.

First home buyer

A household which bought their dwelling in the three years prior to being interviewed, and neither the reference person nor their co-resident partner had owned or been purchasing a home previously.

Formal child care

Regulated child care away from the child's home. The main types of formal care are before and/or after school care, long day care, family day care, occasional care and vacation care.

Full-time student

A person 15 years or over who is classified as a full-time student by the institution they attend, or considers himself/herself to be a full-time student. Full-time study does not preclude employment.

Gini coefficient

A summary measure of inequality of income distribution. For further information see Appendix 1.

Government pensions and allowances

Income support payments from government to persons under social security and related government programs. Included are pensions and allowances received by aged, disabled, unemployed and sick persons, families and children, veterans or their survivors, and study allowances for students. All overseas pensions and benefits are included here, although some may not be paid by overseas governments. Family Tax Benefit, Baby Bonus and Child Disability Assistance Payment paid to recipients of Carer Allowance are also included in government pensions and allowances.

Gross imputed rent

The estimated market rent that a dwelling would attract if it were to be commercially rented.

Gross income

Income from all sources, whether monetary or in kind, before income tax, the Medicare levy and the Medicare levy surcharge are deducted.

Group household

See Non-family household.

Household

A person living alone or a group of related or unrelated people who usually live in the same private dwelling.

Income

Income consists of all current receipts, whether monetary or in kind, that are received by the household or by individual members of the household, and which are available for, or intended to support, current consumption.

Income includes receipts from:

- wages and salaries and other receipts from employment (whether from an employer or own incorporated enterprise), including income provided as part of salary sacrificed and/or salary package arrangements
- profit/loss from own unincorporated business (including partnerships)
- net investment income (interest, rent, dividends, royalties)
- government pensions and allowances
- private transfers (e.g. superannuation, workers' compensation, income from annuities, child support, and financial support received from family members not living in the same household).

Gross income is the sum of the income from all these sources before income tax, the Medicare levy and the Medicare levy surcharge are deducted. Other measures of income are Disposable income and Equivalised disposable household income.

Note that child support and other transfers from other households are not deducted from the incomes of the households making the transfers.

Income unit

One person or a group of related persons within a household, whose command over income is assumed to be shared. Income sharing is assumed to take place within married (registered or de facto) couples, and between parents and dependent children.

Incorporated business

An incorporated business is a company that has a registered business name with the **Australian Securities and Investment Commission (ASIC)** and a legal status which is separate to that of the individual owners of the business.

Informal child care

Non-regulated child care, arranged by a child's parent/guardian, either in the child's home or elsewhere. It comprises care by (step) brothers or sisters, care by grandparents, care by other relatives (including a parent living elsewhere) and care by other (unrelated) people such as friends, neighbours, nannies or babysitters. It may be paid or unpaid.

Labour force status

Classifies all persons aged 15 years and over according to whether they were employed, unemployed or not in the labour force.

Landlord type

For renters, the type of entity to whom rent is paid or with whom the tenure contract or arrangement is made. Renters are classified to one of the following categories:

- state/territory housing authority - where the household pays rent to a state or territory housing authority or trust
- private landlords - where the household pays rent to a real estate agent or to another person not in the same household
- other - where the household pays rent to the owner/manager of a caravan park, an employer (including a government authority), a housing cooperative, a community or church group, or any other body not included elsewhere.

Lone person household

See Non-family households.

Low Economic Resource household

People with low economic resources (i.e. low consumption possibilities) are those in households in the lowest two quintiles (i.e. 40%) of both equivalised disposable household income and equivalised household net worth.

Main source of income

That source from which the most positive income is received. If total income is nil or negative the main source is undefined. As there are several possible sources, the main source may account for less than 50% of gross income.

Mean income

The total income received by a group of units divided by the number of units in the group. For more detail about household weighted and person weighted means, see Appendix 1.

Median income

That level of income which divides the units in a group into two equal parts, one half having incomes above the median and the other half having incomes below the median. For more detail about household weighted and person weighted medians, see Appendix 1.

Medicare levy

Medicare is Australia's universal health care system. The Medicare levy is a specific tax, based on individual income, intended to assist in the funding of this system.

Medicare levy surcharge

The Medicare levy surcharge is a levy, or an additional tax, on Australian taxpayers who do not have an appropriate level of private hospital insurance and who are earning more than the specified income threshold.

Multiple family household

A household containing two or more families. Unrelated individuals may also be present.

Negative income

Income may be negative when a loss accrues to a household as an owner or partner in unincorporated businesses, rental properties or other investment income. Losses occur when operating expenses and depreciation are greater than gross receipts.

Negative net worth

Net worth may be negative when household liabilities exceed household assets.

Net imputed rent

Gross imputed rent less housing costs. Net imputed rent is an estimate of the value of housing services that households receive from home ownership or by households paying subsidised rent or occupying their dwelling rent free. Housing costs for the purpose of calculating net imputed rent for owner-occupiers comprise:

- rates payments (general and water)
- body corporate fees
- the interest component of repayments of loans that were obtained for the purposes of purchasing or building
- rent payments
- house insurance costs
- repair and maintenance costs.

Net worth

Net worth is the value of a household's assets less the value of its liabilities. Net worth may be negative when household liabilities exceed household assets.

Non-dependent children

Persons aged 15 years and over who:

- do not have a spouse or offspring of their own in the household
- have a parent in the household
- are not full-time students aged 15-24 years.

Non-family household

A household that consists of unrelated persons only. Non-family households are classified to one of the following categories:

- group household - a household consisting of two or more unrelated persons where all persons are aged 15 years and over. There are no reported couple relationships, parent-child relationships or other blood relationships in these households
- lone person household - a household consisting of a person living alone.

Not in the labour force

Persons not in the categories employed or unemployed as defined.

One family households

One family households are classified to one of the following categories:

- couple only - two persons in a registered or de facto marriage, who usually live in the same household
- couple family with dependent children - a household consisting of a couple with at least one dependent child. The household may also include non-dependent children, other relatives and unrelated individuals
- one parent family with dependent children - a household comprising a lone parent with at least one dependent child. The household may also include non-dependent children, other relatives and unrelated individuals
- other one family households - a household comprising:
 - one couple with their non-dependent children only
 - one couple, with or without non-dependent children, plus other relatives
 - one couple, with or without non-dependent children or other relatives, plus unrelated individuals
 - a lone parent with his/her non-dependent children, with or without other relatives and unrelated individuals
 - two or more related individuals where the relationship is not a couple relationship or a parent-child relationship (e.g. two brothers).

One parent family with dependent children

See One family households.

Other income

Income other than wages and salaries, own unincorporated business income and government pensions and allowances. This includes income received as a result of ownership of financial assets (interest, dividends), and of non-financial assets (rent, royalties) and other current receipts from sources such as superannuation, child support, workers' compensation and scholarships. Income from rent is net of operating expenses and depreciation and may be negative when these are greater than gross receipts.

Other landlord type

Where the household pays rent to the owner/manager of a caravan park, an employer (including a government authority), a housing cooperative, a community or church group, or any other body not included elsewhere.

Other one family households

See One family households.

Other tenure type

A household which is not an owner (with or without a mortgage), or a renter. Includes rent free.

Own account worker

A person who operates his or her own unincorporated business or engages independently in a profession or trade and hires no employees.

Own unincorporated business income

The profit/loss that accrues to persons as owners of, or partners in, unincorporated businesses. Profit/loss consists of the value of gross output of the business after the deduction of operating expenses (including depreciation). Losses occur when operating expenses are greater than gross receipts and are treated as negative income.

Owner (of dwelling)

A household in which at least one member owns the dwelling in which the household members usually reside. Owners are divided into two categories - owner without a mortgage and owner with a mortgage. If there is any outstanding mortgage or loan secured against the dwelling the household is an owner with a mortgage. If there is no mortgage or loan secured against the dwelling the household is an owner without a mortgage.

Percentiles

When all households or persons in the population are ranked from the lowest to the highest on the basis of some characteristic such as their household income, they can then be divided into equal sized groups. Division into 100 groups gives percentiles. The highest value of the characteristic in the tenth percentile is denoted P10. The median or the top of the 50th percentile is denoted P50. P20, P80 and P90 denote the highest values in the 20th, 80th and 90th percentiles. Ratios of values at the top of selected percentiles, such as P90/P10, are often called percentile ratios. See Appendix 1 for information on the use of percentile ratios in analysing distributions.

Percentiles ratios

Percentile ratios summarise the relative distance between two points in a distribution. To illustrate the full spread of the income distribution, the percentile ratio needs to refer to points near the extremes of the distribution, for example, the P90/P10 ratio. The P80/P20 ratio better illustrates the magnitude of the range within which the income of the majority of households falls. The P80/P50 and P50/P20 ratios focus on comparing the ends of the income distribution with the midpoint.

Preschool

Educational and developmental programs for children in the year (or in some jurisdictions, two years) before they begin full-time primary education.

Private income

Current receipts from private organisations, including wages and salaries, income from own business, superannuation, workers' compensation, income from annuities, interest, dividends, royalties, income from rental properties, scholarships and child support.

Quintiles

Groupings that result from ranking all households or persons in the population in ascending order according to some characteristic such as their household income and then dividing the population into five equal groups, each comprising 20% of the estimated population.

Ratio of household incomes at top of selected income percentiles

See Percentiles.

Reference person

The reference person for each household is chosen by applying, to all household members aged 15 years and over, the selection criteria below, in the order listed, until a single appropriate reference person is identified:

- the person with the highest tenure when ranked as follows: owner without a mortgage, owner with a mortgage, renter, other tenure
- one of the partners in a registered or de facto marriage, with dependent children
- one of the partners in a registered or de facto marriage, without dependent children
- a lone parent with dependent children
- the person with the highest income
- the eldest person.

Relative standard error (RSE)

The standard error expressed as a percentage of the estimate for which it was calculated. It is a measure which is independent of both the size of the sample, and the unit of measurement and as a result, can be used to compare the reliability of different estimates. The smaller an estimate's RSE, the more likely it is that the estimate is a good proxy for that which would have been obtained if the whole population had been surveyed. For further information see Appendix 4.

Renter

A household which pays rent to reside in the dwelling. See further classification by Landlord type.

Salary packaging

An arrangement for the employer to remunerate the employee with a combination of cash wages and salaries and one or more non-cash benefits, to the value of the employee's total remuneration.

Salary sacrifice

An arrangement under which an employee agrees contractually to forgo part of the remuneration, which the employee would otherwise receive as wages and salaries, in return for the employer or someone associated with the employer providing benefits of a similar value.

Selected dwelling

The private dwelling selected in the sample for the survey.

Significant person

Significant persons are defined as follows:

- all members of lone person or couple only households
- all parents in a couple with children household or a single parent household
- the person aged 15 years or over in a group household where one person is aged 15 years or over and the other members of the household are less than 15 years old
- 50% of the persons aged 15 years and over in all other households.

Social transfers in kind

Non-cash benefits and services provided by the government to households for education, health, housing, social security and welfare, and electricity concessions and rebates. It includes reimbursements of approved expenditures such as the Medicare rebate, the Private Health Insurance Rebate, the Child Care Benefit and the Child Care Rebate. The cost of administering the provision of social assistance benefits in cash is included. For further information see Appendix 4.

Standard error

A measure of the likely difference between estimates obtained in a sample survey and estimates which would have been obtained if the whole population had been surveyed. The magnitude of the standard error associated with any survey is a function of sample design, sample size and population variability. For further information see Appendix 5.

Statistical Division (SD)

The largest spatial units within each state/territory in the main structure of the Australian Standard Geographical Classification (ASGC) (cat. no. 1216.0).

Study loans

Study loans are debts incurred under Higher Education Loans Program (HELP), the government education payment scheme, and other government higher education schemes. They also include loans incurred prior to 2005 under the Higher Education Contribution Scheme (HECS) and the Student Financial Supplement Scheme (SFSS). A feature of these loans is that the obligation to repay them only exists when the student's income exceeds a threshold. The debt is also extinguished upon death.

Tenure type

The nature of a household's legal right to occupy the dwelling in which the household members usually reside. Tenure is determined according to whether the household owns the dwelling outright, owns the dwelling but has a mortgage or loan secured against it, is paying rent to live in the dwelling or has some other arrangement to occupy the dwelling.

Trusts

Any type of managed fund which involves the pooling of investors' money in order for a trustee or professional manager to administer that fund. Examples include listed and unlisted public unit trusts, cash management trusts, property trusts and family trusts used only for investment purposes.

Unemployed

Persons aged 15 years and over who were not employed during the week before the interview and had actively looked for full-time or part-time work at any time in the four weeks before the interview and:

- were available for work in the week before the interview
- were waiting to start a new job within four weeks from the interview and would have started in the week before the interview if the job had been available then.

Unincorporated business

A business in which the owner(s) and the business are the same legal entity, so that, for example, the owner(s) are personally liable for any business debts that are incurred.

Wages and salaries

An employee's total remuneration, whether monetary or in kind, received as a return to labour from an employer or from a person's own incorporated business. It comprises wages and salaries, bonuses, amounts salary sacrificed, non-cash benefits such as the use of motor vehicles and subsidised housing, and termination payments.

Wealth

See Net worth.

Abbreviations

ABBREVIATIONS

ABS	Australian Bureau of Statistics
ACT	Australian Capital Territory
ASNA	Australian System of National Accounts
ATO	Australian Taxation Office
Aust.	Australia
CCB	Child Care Benefit
CCR	Child Care Rebate (formerly known as Child Care Tax Rebate: CCTR)
CD	collection district
CPI	Consumer Price Index
CRB	collector record book
CURF	confidentialised unit record file
ERP	estimated resident population
FISIM	financial intermediation services indirectly measured
GFC	global financial crisis
GFS	Government Finance Statistics
GMI	gross mixed income
GOS	gross operating surplus
GST	goods and services tax
HECS	Higher Education Contribution Scheme
HES	Household Expenditure Survey
MSI	main source of income
NPISH	non-profit institutions serving households
NSW	New South Wales
NT	Northern Territory
OECD	Organisation for Economic Co-operation and Development
PHIR	Private Health Insurance Rebate
Qld	Queensland
ROGS	Report on Government Services
RSE	relative standard error
SA	South Australia
SE	standard error
SFSS	Student Financial Supplement Scheme
SIH	Survey of Income and Housing
STIK	social transfers in kind
Tas.	Tasmania
Vic.	Victoria
WA	Western Australia

Analysing income distribution (Appendix)

APPENDIX 1 ANALYSING INCOME DISTRIBUTION

INTRODUCTION

There are many ways to illustrate aspects of the distribution of income and to measure the extent of income inequality. In this publication, five main types of indicator are used - means and medians, frequency distributions, percentile ratios, income shares, and Gini coefficients. This Appendix describes how these indicators are derived.

MEAN AND MEDIAN

Mean household income (average household income) and median household income (the midpoint when all persons or households are ranked in ascending order of household income) are simple indicators that can be used to show income differences between subgroups of the population. Many tables in this publication include mean household income and median household income data.

The main income measure used in this publication is equivalised disposable household income, and the means and medians are calculated with respect to the relevant number of persons. This enables people in large households to have the same contribution to the mean/median as people living alone, and is possible because equivalised disposable household income is an indicator of the economic resources available to each individual in a household.

The method for calculating means is described under 'Estimation' in the Explanatory Notes.

In some tables describing households, the mean and median of gross household income are also shown. These measures are calculated with respect to the relevant number of households, not persons. They are sometimes known as household weighted measures.

FREQUENCY DISTRIBUTION

A frequency distribution illustrates the location and spread of income within a population. It groups the population into classes by size of household income and gives the number or proportion of people in each income range. A graph of the frequency distribution is a good way to portray the essence of the income distribution. The second graph (S4) in the Summary of Findings shows the proportion of people within \$50 household income ranges.

Frequency distributions can provide considerable detail about variations in the income of the population being described, but it is difficult to describe the differences between two frequency distributions. They are therefore often accompanied by other summary statistics, such as the mean and median. Taken together, the mean and median can provide an indication of the shape of the frequency distribution. As can be seen in the second graph (S4) in the Summary of Findings, the distribution of income tends to be asymmetrical, with a small number of people having relatively high household incomes and a larger number of people having relatively lower household incomes. The greater the asymmetry, the greater will be the difference between the mean and the median.

QUANTILE MEASURES

When persons (or any other units) are ranked from the lowest to the highest on the basis of some characteristic such as their household income, they can then be divided into equally sized groups. The generic term for such groups is quantiles.

Quintiles, deciles and percentiles

When the population is divided into five equally sized groups, the quantiles are called quintiles. If there are 10 groups, they are deciles, and division into 100 groups gives percentiles. Thus the first quintile will comprise the first two deciles and the first 20 percentiles.

This publication frequently presents data classified into income quintiles, supplemented by data relating to the 2nd and 3rd deciles combined. The latter is included to enable quintile style analysis to be carried out without undue impact from very low incomes which may not accurately reflect levels of economic wellbeing (see paragraphs 30 to 33 of Explanatory Notes).

Equivalised disposable household income is the income measure used to define the quantiles shown in this publication, and the quantiles each comprise the same number of persons, that is, they are person weighted.

Upper values and medians

In some analyses, the statistic of interest is the boundary between quantiles. This is usually expressed in terms of the upper value of a particular percentile. For example, the upper value of the first quintile is also the upper value of the 20th percentile and is described as P20. The upper value of the ninth decile is P90. The median of a whole population is P50, the median of the 3rd quintile is also P50, the median of the first quintile is P10, etc.

Percentile ratios

Percentile ratios summarise the relative distance between two points on the income distribution. To illustrate the full spread of the income distribution, the percentile ratio needs to refer to points near the extremes of the distribution, for example, the P90/P10 ratio. The P80/P20 ratio better illustrates the magnitude of the range within which the incomes of the majority of the population fall. The P80/P50 and P50/P20 ratios focus on comparing the ends of the income distribution with the midpoint (the median).

Income share

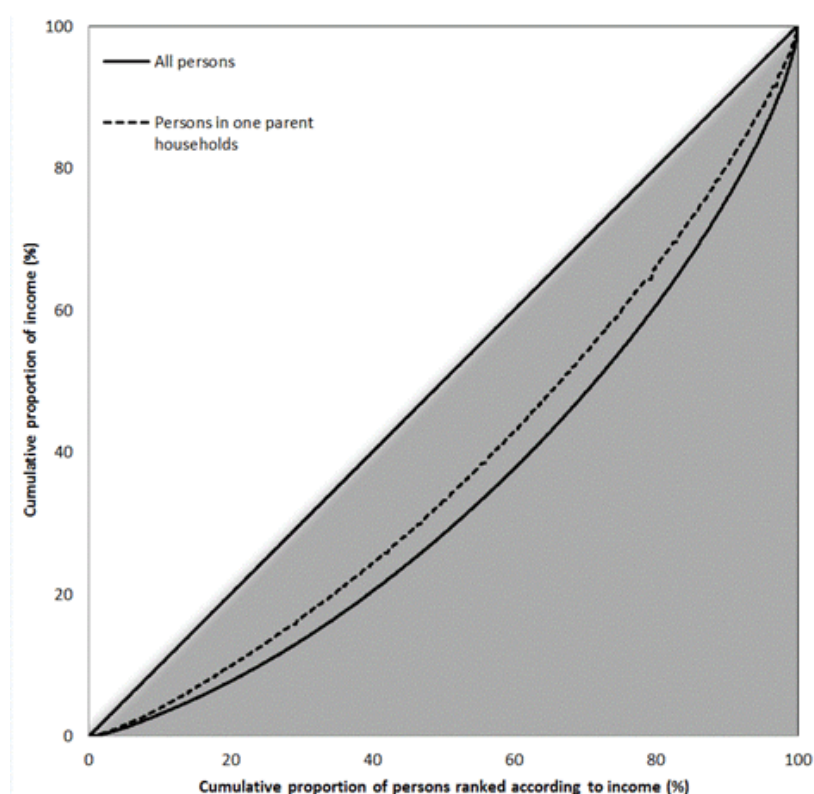
Income shares can be calculated and compared for each income quintile (or any other subgrouping) of a population. The aggregate income of the units in each quintile is divided by the overall aggregate income of the entire population to derive income shares.

GINI COEFFICIENT

The Gini coefficient is a single statistic which summarises the distribution of income across the population. Some other single statistic summaries of inequality are discussed in Appendix 1 of the 2002-03 issue of this publication.

The Gini coefficient can best be described by reference to the Lorenz curve. The Lorenz curve is a graph with horizontal axis showing the cumulative proportion of the persons in the population ranked according to household income and with the vertical axis showing the corresponding cumulative proportion of equivalised disposable household income. The graph then shows the income share of any selected cumulative proportion of the population, as can be seen below.

A1. LORENZ CURVE



If income were distributed evenly across the whole population, the Lorenz curve would be the diagonal line through the origin of the graph. The Gini coefficient is defined as the ratio of the area between the actual Lorenz curve and the diagonal (or line of equality) and the total area under the diagonal. The Gini coefficient ranges between zero when all incomes are equal and one when one unit receives all the income, that is, the smaller the Gini coefficient the more even the distribution of income.

Normally the degree of inequality is greater for the whole population than for a subgroup within the population because subpopulations are usually more homogeneous than full populations. This is illustrated in the graph above, which shows two Lorenz curves from the 2011-12 Survey of Income and Housing. The Lorenz curve for the whole population of the survey is further from the diagonal than the curve for persons living in one parent, one family households, with at least one dependent child. Correspondingly, the calculated Gini coefficient for all persons was 0.320 while the coefficient for the persons in the one parent households included here was 0.245.

Current and annual income (Appendix)

APPENDIX 2 CURRENT AND ANNUAL INCOME

INTRODUCTION

The Survey of Income and Housing (SIH) produces estimates of 'current' income and estimates of full year, or annual, income with respect to the 'previous financial year'. The tables in the main body of this publication refer to 'current' income, that is, estimates of income being received at the time the data were collected from respondents. Current income provides the most up to date information available and in some cases the most accurate information available. But it also has some disadvantages. This Appendix discusses the differences in 'current' and 'annual' income measures and presents comparative estimates on both bases.

Table A3 in this Appendix compares current gross income with previous financial year gross income for common reference years. For example, the previous financial year income for reference year 1995-96 is compiled from data collected in the 1996-97 SIH, whereas the current income for reference year 1995-96 is compiled from data collected in the 1995-96 SIH.

WAGE AND SALARY INCOME

For wage and salary income, Table A3 in this Appendix shows that, for each reference year up until 2002-03 aggregate income collected on a previous financial year basis was greater than aggregate income collected on a current basis.

Current wage and salary income relates to usual income from the last payment received by the respondent. The reference period for any individual respondent is likely to be the previous week, fortnight or month, depending on the length of the pay period for the job(s) in which the respondent is employed. The length of the reference period is collected in the survey so that the value can be scaled to a common basis such as dollars per week (as presented in tables in the main body of this publication) or dollars per year (as presented in Table A3 in this Appendix).

Additional questions are used to obtain information about receipts which may not have been included in the most recent payment. For example, for wage and salary earners for surveys prior to 2007-08, information on irregular overtime, bonuses and non-cash benefits was only collected on a previous financial year basis.

However from 2007-08 onwards, wages and salaries collected on a current basis include irregular overtime, bonuses and non-cash incomes. Therefore current and previous year measures are likely to be very much closer in coverage than in previous cycles.

GOVERNMENT PENSIONS AND ALLOWANCES

Current government pensions and allowances also relate to income from the last payment received.

Benefits are normally received fortnightly. As with wages and salaries, there are some benefit components, such as quarterly seniors supplement that may not be included in estimates of current income. It would be expected that estimates of current government pensions and allowances could be slightly less than previous financial year estimates, reflecting potential omission of such supplementary payment and possible part years effects in the previous year.

Estimates of government pensions and allowances reported on a previous financial year basis, for the five years that can be compared (1994-95 to 2002-03) were 3.9% lower than estimates of government pensions and allowances reported as current income, as can be seen in Table A3 in this Appendix.

In cases where it appears likely that an individual SIH respondent has failed to report previous financial year benefits, previous year benefit income is imputed. For example, where a respondent has reported receiving a current benefit such as age pension, is of an age that would qualify for the age pension in the previous year, and that person has not reported receiving significant income from other sources in the previous financial year, it can be assumed that they probably would have also received the age pension in the previous financial year. In such cases, previous financial year age pension has been imputed on the basis of the amount reported as current income, adjusting for benefit rate changes over the previous 12 months.

However, imputation for previous year benefit income, based on likely ongoing entitlement, is not possible for benefits such as Newstart or Youth Allowance, and Table A3 in this Appendix indicates that, in aggregate, previous financial year income falls short of current income after the implementation of the imputation procedure described in the previous paragraph.

OWN UNINCORPORATED BUSINESS INCOME

Estimates of current income from own unincorporated business are quite different in nature to the estimates of current income for the two income sources discussed above.

The concept of business income is a net concept. It is the profit or loss derived by deducting operating expenses (including depreciation) from the value of gross output. In the past, many unincorporated businesses did not calculate profit and loss data more than once a year, and for many businesses there are revenues earned or costs incurred only infrequently during the year. Hence, in earlier surveys, SIH respondents were not asked to provide a value of current business income distinct from the value of business income received in the previous financial year.

Up to and including the 2002-03 SIH cycle, for respondents who had been in business in the previous financial year and who were currently still in business, their current own unincorporated business income was estimated to be the same amount as the previous year income (including if it was a loss), or scaled up to a full year basis if the business only operated for part of the previous year. It was implicitly assumed that any business only commencing operations in the current year would have zero income.

Since the 2003-04 SIH, respondents who currently operated an unincorporated business have been asked to estimate their income from the business for the full current financial year. In many cases, respondents could refer to the Business Activity Statements prepared for the Australian Taxation Office to help them provide an estimate. Even where this was not possible, especially for those respondents interviewed early in the financial year, the respondents are likely to be able to provide a more reasonable estimate than that generated by the methodology used in previous cycles. Under the previous methodology, estimates could have a strong downwards bias, particularly for new businesses, but could also be significantly upwardly biased if the current business circumstances had turned down from the previous year. There is also some likelihood that respondent estimates under the new methodology may be either optimistic or pessimistic and the estimates may have some bias. The new methodology has particularly resulted in far fewer households being recorded with current business incomes that are negative, zero or only slightly positive.

INVESTMENT INCOME

Investment income includes interest and dividend income received as a result of the ownership of financial assets, and rent and royalty income received from the ownership of non-financial assets. The rent component of investment income is measured on a net basis, that is, gross rent less operating expenses. Interest paid on money borrowed to purchase shares or units in trusts is also netted off income earned from these sources. All other components, for which associated expenses are normally relatively small, are on a

gross basis.

As for own unincorporated business income, since the 2003-04 SIH, respondents are asked to provide an estimate of their expected investment income in the current financial year. In earlier surveys, estimates of current investment income were derived by simply assuming that current income was equal to previous financial year income.

OTHER INCOME

The remaining income sources include superannuation and life insurance pensions, child support, workers' compensation, scholarships and other current transfers received from family members living in other households. These are collected both on a current basis and on a previous financial year basis. From 2007-08 onwards, the coverage of inter household transfers has been widened to include less regular paid transfers that are intended to support current consumption.

COMPARISON OF ESTIMATES

There are two major advantages of the current income estimates compared to previous financial year income estimates. First, they are more up to date. From 2003-04 this applies to all forms of income. For previous surveys, this applies for wages and salaries, for government pensions and allowances and for 'other' income (as defined in the preceding paragraph), which together accounted for 88% of total current income in 2002-03. Second, they appear to be more accurately reported for government pensions and allowances, and may also be more accurately reported for those elements of wages and salaries that are included in current income and for 'other' income.

On the other hand, up until the 2005-06 survey, the previous financial year estimates had the major conceptual advantage of being annual estimates with more complete coverage of income components. They have a longer time perspective, which while allowing short-term fluctuations in income to have an influence, do not allow short-term situations to potentially dominate the measure being compiled. If a short-term fluctuation has an undue influence on a current income measure, the measure is not a good indicator of underlying economic well-being. From 2007-08 the changes to capture irregular bonuses, overtime and non-cash incomes in wages and salaries have addressed the major coverage gaps in current income measures.

The previous financial year income estimates also have the attraction of being internally consistent with respect to the time periods to which the underlying income data relate. Prior to 2003-04 the total current income estimates were compiled from a mix of data collected on a current basis and on a previous financial year basis. This shortcoming was addressed in 2003-04 and subsequent years, with the current income estimates for business and investment income being the respondents' estimates of income for the full current financial year.

When analysing previous financial year data, it should be noted that the composition of the household, employment status of members of the household, etc., all relate to the current period. If the composition of the household has changed, previous financial year household income estimates relate to a quasi household. In many cases this will not have a marked effect on the data. If, for example, an additional adult joined the household, their previous financial year income will be included in total 'household' income for the previous financial year, but their presence will be reflected in the household composition data that are used for calculating the equivalising factor for that previous year, muting the impact of the artificially inflated previous year income for the household.

However, the impact of household composition changing between the previous and current years can be more marked. For example, a household may have had an additional member in the previous year and that person may have provided the bulk of the income for the household. But since SIH can only include the previous financial year income of the household members remaining at the time of interview, the household may incorrectly appear to have had very low income in the previous year, perhaps well below the levels which would have entitled members to social security benefits.

Similarly, prior to the 2003-04 SIH, previous financial year data were not collected for respondents who had only arrived in Australia in the current financial year. Therefore any previous financial year income they received while overseas did not contribute to the previous financial year income compiled for the household for 2001-02 and earlier years. But their presence is reflected in the equivalising factor applied to the income

of the rest of the household, resulting in an underestimate of equivalised income of the household. While it is possible to omit such households from income distribution calculations, that has not been done for the tables included in this appendix.

Table A4 in this Appendix provides income distribution indicators compiled from previous financial year data. It provides alternative estimates to the current income estimates provided in Table 1 in the main body of this publication.

Comparisons can be made between the two tables for five of the reference periods 1994-95 to 2002-03 and a summary of the change over the 8 years span of the estimates is given in Table A2 below.

A2. SELECTED INCOME DISTRIBUTION INDICATORS, Equivalised disposable household income

		CURRENT INCOME BASIS			PREVIOUS FINANCIAL YEAR BASIS			
		1994-95	2002-03	change	1994-95	2002-03	change	Difference
Mean income per week in 2011-12 dollars								
Low income(a)	\$	308	346	12.3	313	350	11.8	-0.5
High income(b)	\$	1 078	1 252	16.1	1 096	1 282	17	0.8
Income shares								
Low income(a)	%	10.8	10.6	-1.9	10.7	10.5	-1.9	-
High income(b)	%	37.8	38.3	1.3	37.6	38.4	2.1	0.8
Percentile ratios								
P90/P10	ratio	3.78	4.00	5.8	3.90	4.02	3.1	-2.7
P80/P20	ratio	2.56	2.63	2.7	2.62	2.63	0.4	-2.4
Gini coefficient	no.	0.302	0.309	2.3	0.302	0.312	3.3	1.0

- nil or rounded to zero (including null cells)

(a) Persons in the 2nd and 3rd income deciles after being ranked by their equivalised disposable household income

(b) Persons in the top income quintile (9th and 10th deciles) after being ranked by their equivalised disposable household income

The previous financial year estimates show stronger growth in real incomes between 1994-95 and 2002-03 for the high income group, compared with current income estimates. The previous financial year estimates show a greater decline in the income share of the low income group and a greater increase in the income share of the high income group, resulting in greater growth in the Gini coefficient. For these indicators, the previous financial year estimates show a greater increase in income inequality than the current income estimates. However, the previous financial year estimates give a smaller increase in the P90/P10 and P80/P20 ratios, indicating a smaller increase in income inequality than shown by the current income estimates.

A3. CURRENT AND PREVIOUS FINANCIAL YEAR GROSS INCOME^(a)

	1993-94 \$b	1994-95 \$b	1995-96 \$b	1996-97 \$b	1997-98 \$b	1998-99 \$b	1999-2000 \$b
Wages and salaries							
Current income	-	194.7	199.3	211.6	223.6	-	251.1
Previous financial year income(b)	194.7	204.4	219.1	232.2	-	257.7	277.0
Government pension and allowances							
Current income	-	34.3	36.5	38.6	39.0	-	41.2
Previous financial year income(b)	30.7	32.8	34.9	36.2	-	37.7	40.5
Own unincorporated business							
Current income	-	18.8	23.2	21.4	23.6	-	28.7
Previous financial year income(b)	18.5	22.8	22.5	24.4	-	27.5	25.9
Investment income							
Current income	-	10.7	10.9	14.4	13.2	-	17.3
Previous financial year income(b)	10.9	11.0	14.3	13.0	-	17.3	15.7
Other income							
Current income	-	7.2	7.9	8.2	9.9	-	10.5
Previous financial year income(b)	6.6	7.0	7.5	8.4	-	8.5	9.7
Total income							
Current income	-	265.8	277.8	294.3	309.3	-	348.9

Previous financial year income(b)	261.4	278.0	298.4	314.2	-	348.7	368.8
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- nil or rounded to zero (including null cells)

(a) Historic data in the table and not adjusted for changes in the Consumer Price Index

(b) Compiled from from the Survey of Income and Housing (SIH) of the year following the reference year. There was no SIH conducted in 1998-99, 2001-02, 2004-05, 2006-07, 2008-09 or 2010-11

A3. CURRENT AND PREVIOUS FINANCIAL YEAR GROSS INCOME^(a)

	2000-01 \$b	2001-02 \$b	2002-03(b) \$b	2003-04(b) \$b	2004-05(b) \$b	2005-06(b) \$b
Wages and salaries						
Current income	268.3	-	308.4	341.7	-	402.1
Previous financial year income(c)	-	311.2	327.1	-	377.4	-
Government pension and allowances						
Current income	46.5	-	49.6	56.3	-	61.1
Previous financial year income(c)	-	44.6	48.3	-	52.0	-
Own unincorporated business						
Current income	27.7	-	33.2	31.2	-	39.4
Previous financial year income(c)	-	31.3	28.0	-	35.8	-
Investment income						
Current income	16.3	-	16.2	21.6	-	29.3
Previous financial year income(c)	-	16.6	19.1	-	26.4	-
Other income						
Current income	11.7	-	15.1	17.7	-	19.7
Previous financial year income(c)	-	13.1	16.5	-	17.8	-
Total income						
Current income	370.5	-	422.5	468.6	-	551.6
Previous financial year income(c)	-	416.9	439.0	-	509.4	-

- nil or rounded to zero (including null cells)

(a) Historic data in the table and not adjusted for changes in the Consumer Price Index

(b) The 2002-03, 2003-04, 2004-05 and 2005-06 data have been recompiled to reflect new treatments of income, where data to support this calculation were collected

(c) Compiled from from the Survey of Income and Housing (SIH) of the year following the reference year. There was no SIH conducted in 1998-99, 2001-02, 2004-05, 2006-07, 2008-09 or 2010-11

A3. CURRENT AND PREVIOUS FINANCIAL YEAR GROSS INCOME^(a)

	2006-07(b) \$b	2007-08(b) \$b	2008-09(b) \$b	2009-10(b) \$b	2010-2011(b) \$b	2011-12(b) \$b
Wages and salaries						
Current income	-	513.1	-	546.6	-	615.4
Previous financial year income(c)	444.3	-	503.1	-	568.4	-
Government pension and allowances						
Current income	-	65.2	-	79.3	-	88.7
Previous financial year income(c)	52.6	-	77.1	-	74.4	-
Own unincorporated business						
Current income	-	40.7	-	40.5	-	46.4
Previous financial year income(c)	37.4	-	34.7	-	37.4	-
Investment income						
Current income	-	43.4	-	39.3	-	41.3
Previous financial year income(c)	33.4	-	35.7	-	38.5	-
Other income						
Current income	-	31.6	-	33.3	-	39.1
Previous financial year income(c)	25.6	-	30.1	-	35.4	-
Total income						
Current income	-	694.0	-	739.0	-	830.9

Previous financial year income(c)	593.3	-	680.7	-	754.1	-
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- nil or rounded to zero (including null cells)

(a) Historic data in the table and not adjusted for changes in the Consumer Price Index

(b) Wages and salaries measured in 2007-08, 2009-10 and 2011-12 on a current financial year basis, and 2006-07, 2008-09 and 2010-11 on a previous financial year basis, expressly include irregular overtime and irregular bonuses as well as non-cash wages and salaries and termination payments not collected in previous survey cycles

(c) Compiled from the Survey of Income and Housing (SIH) of the year following the reference year. There was no SIH conducted in 1998-99, 2001-02, 2004-05, 2006-07, 2008-09 or 2010-11

A4. INCOME DISTRIBUTION INDICATORS, Previous financial year income(a)

Person weighted indicator	1993-94	1994-95	1995-96	1996-97	1998-99	1999-2000	2000-01	2001-02	2002-03	2004-05	2006-07	2008-09	2010-11
Mean income per week(b)													
Lowest quintile	\$ 216	226	233	234	238	243	242	249	258	248	268	287	
Second quintile	\$ 372	376	380	377	402	407	424	426	454	470	515	524	
Third quintile	\$ 520	518	524	529	567	569	591	594	633	671	729	737	
Fourth quintile	\$ 694	696	699	715	758	763	793	787	835	923	980	997	
Highest quintile	\$ 1 086	1 096	1 114	1 143	1 220	1 246	1 267	1 282	1 412	1 624	1 667	1 695	
All persons	\$ 578	583	590	600	637	646	663	667	718	787	832	848	
Second and third deciles	\$ 307	313	318	315	332	338	346	350	369	377	414	425	
Income per week at top of selected percentiles(b)													
10th (P10)	\$ 249	254	259	261	269	273	275	281	293	291	312	331	
20th (P20)	\$ 303	311	319	315	328	337	342	349	367	375	412	424	
30th (P30)	\$ 372	376	379	377	402	404	422	423	450	468	514	523	
40th (P40)	\$ 444	443	449	446	480	482	508	510	543	574	620	630	
50th (P50)	\$ 521	517	524	529	565	570	589	593	634	670	728	734	
60th (P60)	\$ 597	600	600	612	659	660	683	680	726	780	837	852	
70th (P70)	\$ 683	691	697	710	754	758	790	781	829	923	973	993	
80th (P80)	\$ 813	815	809	826	881	891	923	917	976	1 084	1 154	1 166	
90th (P90)	\$ 995	989	990	1 013	1 075	1 109	1 123	1 130	1 205	1 362	1 446	1 465	
Income share													
Lowest quintile	\$ 7.5	7.8	7.9	7.8	7.5	7.5	7.3	7.5	7.2	6.3	6.5	6.8	
Second quintile	\$ 12.9	12.9	12.9	12.6	12.6	12.6	12.8	12.8	12.6	11.9	12.4	12.4	
Third quintile	\$ 18.0	17.8	17.8	17.6	17.8	17.6	17.8	17.8	17.6	17.1	17.5	17.4	
Fourth quintile	\$ 24.0	23.9	23.7	23.8	23.8	23.6	23.9	23.6	23.3	23.4	23.6	23.5	
Highest quintile	\$ 37.6	37.6	37.8	38.2	38.3	38.6	38.2	38.4	39.3	41.3	40.1	40.0	
All persons	\$ 100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Second and third deciles	\$ 10.6	10.7	10.8	10.5	10.4	10.5	10.4	10.5	10.3	9.6	9.9	10.0	
Ratio of incomes at top of selected income percentile													
P90/P10	\$ 4.00	3.90	3.82	3.89	4.00	4.06	4.08	4.02	4.11	4.68	4.63	4.42	
P80/P20	\$ 2.68	2.62	2.54	2.62	2.68	2.64	2.70	2.63	2.66	2.89	2.80	2.75	
P80/P50	\$ 1.56	1.58	1.55	1.56	1.56	1.56	1.57	1.55	1.54	1.62	1.59	1.59	
P20/P50	\$ 0.58	0.60	0.61	0.60	0.58	0.59	0.58	0.59	0.58	0.56	0.57	0.58	
Gini coefficient	no. 0.304	0.302	0.302	0.308	0.312	0.313	0.312	0.312	0.322	0.351	0.337	0.334	

(a) Compiled from data collected in the Survey of Income and Housing of the year following the reference years. Income is equivalised disposable household income

(b) In 2011-12 dollars, adjusted using changes in the Consumer Price Index

Equivalised disposable household income (Appendix)

APPENDIX 3 EQUIVALISED DISPOSABLE HOUSEHOLD INCOME

EQUIVALENCE SCALES

Equivalence scales have been devised to make adjustments to the actual incomes of households in a way that enables analysis of the relative wellbeing of households of different size and composition. For example, it would be expected that a household comprising two people would normally need more income than a

lone person household if the two households are to enjoy the same standard of living.

One way of adjusting for this difference in household size might be simply to divide the income of the household by the number of people within the household so that all income is presented on a per capita basis. However, such a simple adjustment assumes that all individuals have the same resource needs if they are to enjoy the same standard of living and that there are no economies of scale derived from living together.

Various calibrations, or scales, have been devised to make adjustments to the actual incomes of households in a way that recognises differences in the needs of individuals within those households and the economies that flow from sharing resources. The scales differ in their detail and complexity but commonly recognise that the extra level of resources required by larger groups of people living together is not directly proportional to the number of people in the group. They also typically recognise that children have fewer needs than adults.

When household income is adjusted according to an equivalence scale, the equivalised income can be viewed as an indicator of the economic resources available to a standardised household. For a lone person household it is equal to household income. For a household comprising more than one person, it is an indicator of the household income that would need to be received by a lone person household to enjoy the same level of economic wellbeing as the household in question.

Alternatively, equivalised household income can be viewed as an indicator of the economic resources available to each individual in a household. The latter view underpins the calculation of income distribution measures based on numbers of people, rather than numbers of households.

CHOICE OF SCALE

While there has been considerable research by statistical and other agencies trying to estimate appropriate values for equivalence scales, no single standard has emerged. In theory, there are many factors which might be taken into account when devising equivalence scales, such as recognising that people in the labour force are likely to face transport and other costs that can affect their standard of living. It might also be desirable to reflect the different needs of children at different ages, and the different cost levels faced by people living in different geographic areas. On the other hand, the tastes and preferences of people vary widely, resulting in markedly different expenditure patterns between households with similar income levels and similar composition. Furthermore, it is likely that equivalence scales that appropriately adjust incomes of low income households are not as appropriate for higher income households, and vice versa. This is because the proportion of total income spent on housing tends to fall as incomes rise, and cheaper per capita housing is a major source of economies of scale that flow from people living together.

It is therefore difficult to define, estimate and use equivalence scales which take all relevant factors into account. As a result, analysts tend to use simple equivalence scales which are chosen subjectively but are nevertheless consistent with the quantitative research that has been undertaken. A major advantage of simpler scales is that they are more transparent to the user, that is, it is easier to evaluate the assumptions being made in the equivalising process.

In this publication, the 'modified OECD' equivalence scale is used. The 'modified OECD' equivalence scale has been used in more recent research work undertaken for the Organisation for Economic Co-operation and Development (OECD), has wide acceptance among Australian analysts of income distribution, and is the stated preference of key Survey of Income and Housing (SIH) users.

DERIVATION OF EQUIVALISED INCOME

Equivalised income is derived by calculating an equivalence factor according to the chosen equivalence scale, and then dividing income by the factor.

The equivalence factor derived using the 'modified OECD' equivalence scale is built up by allocating points to each person in a household. Taking the first adult in the household as having a weight of 1 point, each additional person who is 15 years or older is allocated 0.5 points, and each child under the age of 15 is allocated 0.3 points. Equivalised household income is derived by dividing total household income by a factor equal to the sum of the equivalence points allocated to the household members. The equivalised income of a lone person household is the same as its unequivalised income. The equivalised income of a

household comprising more than one person lies between the total value and the per capita value of its unequivalised income.

Equivalised household income is an indicator of the economic resources available to each member of a household. It can therefore be used for comparing the situation of individuals as well as comparing the situation of households.

When unequivalised income is negative, such as when losses incurred in a household's unincorporated business or other investments are greater than any positive income from any other sources, then equivalised income has been set to zero.

GROSS INCOME AND EQUIVALISED DISPOSABLE INCOME

The SIH collects data on households' gross income. However, disposable income, that is, gross income less the value of income tax and Medicare levy to be paid on the gross income, is a better indicator of the resources available to a household to maintain its standard of living. Therefore, for this publication, estimates of income tax payable on gross income reported in the SIH are made by means of a tax model. The tax and Medicare estimates are subtracted from gross income to give disposable income, and the equivalence factors are applied to the estimates of disposable income. Person weighted measures of income distribution are then derived from the estimates of equivalised disposable household income. (Appendix 1 describes the difference between person weighted and household weighted measures.)

Means and medians of both gross income and equivalised disposable income are shown in some tables in this publication to allow users to see the differences between data as collected and data as standardised to facilitate income distribution analysis. The following table shows the differences in income measures when calculated from data at different stages in the progression from gross household income to person weighted equivalised disposable household income.

A5. Gross income to person weighted equivalised disposable income, 2011-12

		EQUIVALISED DISPOSABLE HOUSEHOLD INCOME PER WEEK				
		Gross household income per week	Income tax per week	Disposable household income per week	Household weighted	Person weighted
Percentile boundaries and percentile ratios						
P10	\$	399	na	399	365	379
P20	\$	618	na	614	429	473
P50	\$	1 442	na	1 284	768	790
P80	\$	2 745	na	2 265	1 246	1 236
P90	\$	3 615	na	2 909	1 581	1 555
P90/P10	ratio	9.06	na	7.29	4.33	4.10
P80/P20	ratio	4.45	na	3.69	2.91	2.61
Means						
All households	\$	1 847	297	1 550	906	918
One family households						
Couple family with dependent children	\$	2 580	491	2 089	935	915
One parent family with dependent children	\$	1 210	110	1 100	630	618
Couple only	\$	1 837	295	1 542	1 030	1 030
Other one family households	\$	2 352	326	2 025	1 007	1 022
Multiple family households	\$	2 900	374	2 526	875	868
Non-family households						
Lone person	\$	864	117	746	747	747
Group households	\$	2 062	289	1 773	1 004	998

na not available

The first column in the table above shows measures calculated from gross household income, as collected in the SIH. The next column shows estimates of income tax to be paid on gross income, with the third column giving the resultant disposable household income.

Individuals with higher incomes will normally be expected to pay higher income tax than individuals with

lower incomes, but this relationship is not as strong for households. A household with relatively high income may comprise only one individual with high income or it may include a number of individuals with relatively low income. The disposable income in the first situation will be lower than that in the second situation, and will result in a reranking of the households in the formation of percentiles. Therefore a household may fall into a different percentile in an analysis of disposable income compared to an analysis of gross income.

As would be expected, the difference between disposable income and gross income increases as income levels increase. At the upper boundary of the tenth percentile (P10), there is little difference, that is, the income tax to be paid by households with the lowest levels of gross income is negligible. In contrast, there is a \$706 per week difference between the P90 value for gross household income and the P90 value for disposable household income.

Disposable income relates to the household as a whole and the percentiles and means are calculated with respect to the numbers of households concerned. These are referred to as household weighted estimates. Equivalised disposable household income can also be household weighted (see the fourth column in the table), but since it can be viewed as a measure of the economic resources available to each individual in a household, income measures for equivalised estimates are generally based on numbers of people rather than numbers of households (see the fifth column in the table). This is referred to as person weighting and ensures that people in large households are given as much weight in the distribution as people in small households. While the ranking underlying the formation of percentiles is the same for the household and person weighted estimates, the boundaries between the percentiles differ because household weighted percentile boundaries create subgroups with equal numbers of households while person weighted percentile boundaries create subgroups with equal numbers of persons. The extent to which the boundaries differ reflects the extent to which the average household size differs between percentiles.

The person weighted estimate of P10 (\$379) is higher than the household weighted estimate of P10 (\$365). This implies that the households with the lowest rankings of equivalised disposable household income tend to comprise a lower than average number of persons. In other words, the 10% of people with the lowest income make up more than the 10% of households with the lowest income.

For lone person households, the two measures of equivalised disposable income and the disposable income are the same (\$747). Equivalised disposable income for lone person households is approximately the same as disposable income, because the equivalising factor for such households is 1.0.

For all other types of household composition, equivalised disposable income is lower than disposable income, since income is adjusted to reflect household size and composition. Mean equivalised disposable income for couple only households is the same for both the household weighted and the person weighted measures since there are always two and only two persons in such households. For most other multi-person households, person weighted mean income is lower than the household weighted mean. This implies that, within each type, larger households tend to have lower equivalised household income.

Social transfers in kind (Appendix) (Appendix)

APPENDIX 4 SOCIAL TRANSFERS IN KIND

INTRODUCTION

This appendix presents the results of a study of the effects of selected government benefits and taxes on the distribution of income among private households in Australia in 2011-12, using data for the first time, from the Survey of Income and Housing (SIH). Household income is increased directly by the Australian government through social assistance benefits in the form of cash payments, such as the age pension and family tax benefit, and indirectly by government expenditures such as those on health and education. On the other hand, household income is reduced by taxes on personal income (direct taxes) and by taxes on production (indirect taxes) passed on in the prices households pay for goods and services.

Benefits allocated in this study were restricted to those that are relatable to particular types of households, while taxes were restricted to taxes on personal income. When the six yearly Household Expenditure Survey (HES) is conducted, it is also possible to allocate taxes on production to households, such as the goods and services tax (GST), using information about the expenditure patterns of households. Previous

studies of the effects of government benefits and taxes on household income have been conducted using HES data and were published in **Government Benefits, Taxes and Household Income, Australia** (cat. no. 6537.0) in relation to 1984, 1988-89, 1993-94, 1998-99, 2003-04 and 2009-10.

The methodologies for allocating social transfers in kind using SIH data were the same, where possible, as the methodologies used in the 2009-10 HES study. However some changes to the allocation of health and education benefits were necessary due to the unavailability of some information usually collected in the HES. Further information on these changes is provided at the end of this appendix in the 'Data sources and methodologies' section.

Concepts

Diagram 1 illustrates the different income concepts used in this study. The most restricted concept of income is **private income (including imputed rent)**, while the most extensive concept used in this study is **disposable income plus social transfers in kind**.

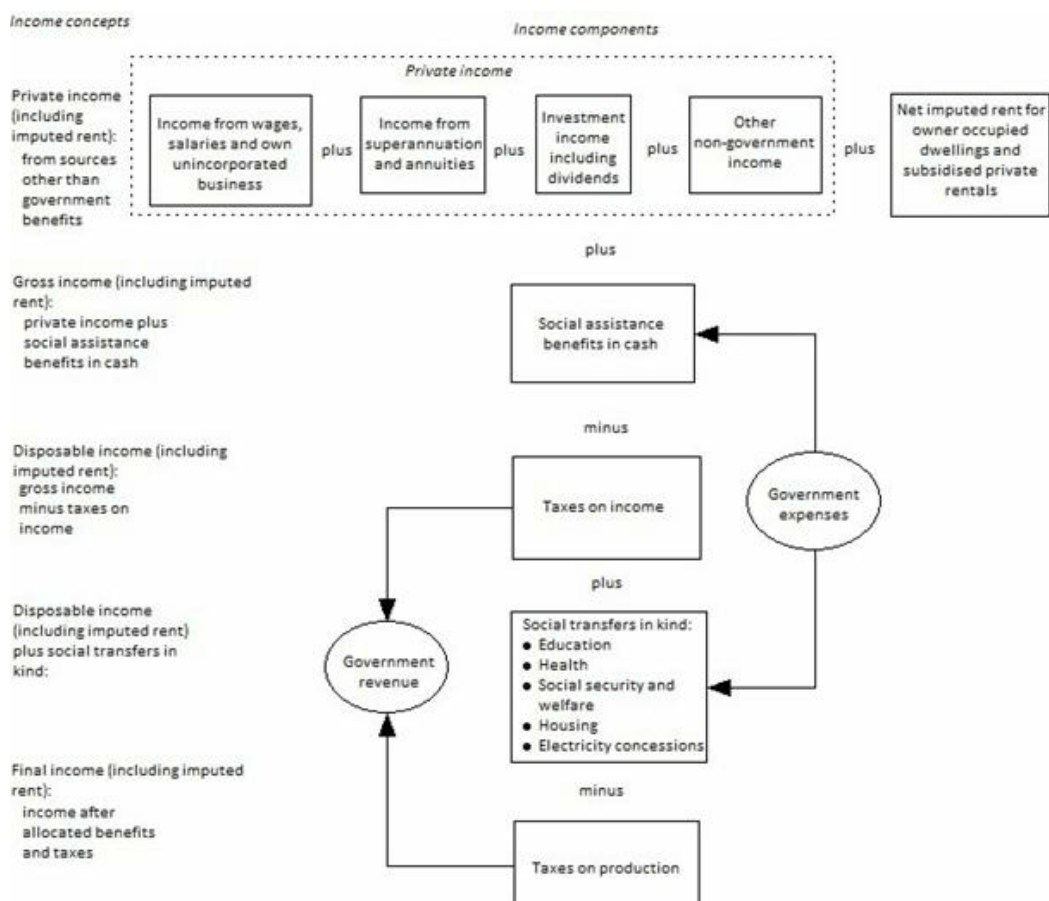
Private income (including imputed rent) is all current receipts, whether monetary or in kind, received excluding social assistance benefits in cash and in kind. This includes wages and salaries, profit/loss from own unincorporated business, net investment income and private transfers. It also includes net imputed rent for owner occupied dwellings and for subsidised private rentals to allow for more meaningful comparisons of the income circumstances of people living in different tenure types.

Gross income is the sum of private income (including imputed rent) and Australian government social assistance benefits in cash (direct Australian government benefits). **Disposable income** is derived by subtracting estimates of taxes on personal income from gross income.

Social transfers in kind (STIK) consist of goods and services provided by the government free or at subsidised prices. The value of government STIK for education, health, housing, social security and welfare, and electricity concessions and rebates (indirect benefits) is added to disposable income to derive **disposable income plus STIK**.

When **taxes on production** are estimated from HES data, it is possible to also derive **final income** which is household **disposable income plus STIK less taxes on production**.

Diagram 1 INCOME CONCEPTS AND COMPONENTS



GOVERNMENT BENEFITS AND TAXES ALLOCATED

Of total Commonwealth, state and local government expenditure in 2011-12, the study allocated \$271.4 billion in benefits to households (\$87.4 billion in social assistance benefits in cash and \$184.1 billion in social transfers in kind) or 52% of total government expenditure of \$522.0 billion. The unallocated amounts mainly reflect government expenditure that are not conceptually relatable to individual households, but they also reflect the lack of suitable indicators to allocate some benefits. The study allocated \$133.7 billion out of \$390.0 billion or 34% of total government revenue.

INCOME REDISTRIBUTION

In 2011-12, households received, on average \$603 per week in total government benefits, and paid \$297 per week in income taxes. Low income households received more social benefits in cash and in kind and paid less income taxes than high income households. Total social assistance benefits also increased with household size. The net effect of government benefits and income taxes was to increase the average income of households in the lower three quintiles, while only marginally increasing average income in the fourth quintile, and decreasing the average income of households in the highest quintile (Graph 1).

Households in the lowest equivalised private income quintile had average private income of \$136 per week, including imputed rent. Their average disposable income, including imputed rent and STIK rose to \$788 per week. These were respectively 13 percent and 65 percent of the average for all households.

1. Equivalised household income, By equivalised private income quintile

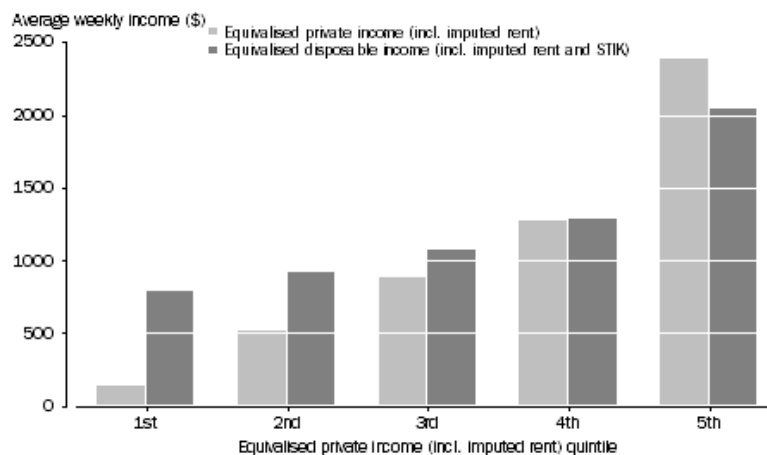


Table 2 shows a range of income distribution measures. Percentile ratios are one measure of the spread of incomes across a population. When STIK were added to equivalised disposable household income including imputed rent, the P90/P10 ratio fell from 3.73 to 2.49.

The Gini coefficient is a single statistic indicator of the degree of inequality, with values closer to 0 representing a lesser degree of inequality, and values closer to 1 representing greater inequality. The addition of STIK decreased the Gini coefficient from 0.303 to 0.226 a decrease of 25%.

The income share of households in the lowest quintile increased from 3% of total equivalised private income including imputed rent, to 11% of total equivalised disposable household income including imputed rent and STIK, while that of households in the highest quintile decreased from 46% to 34%.

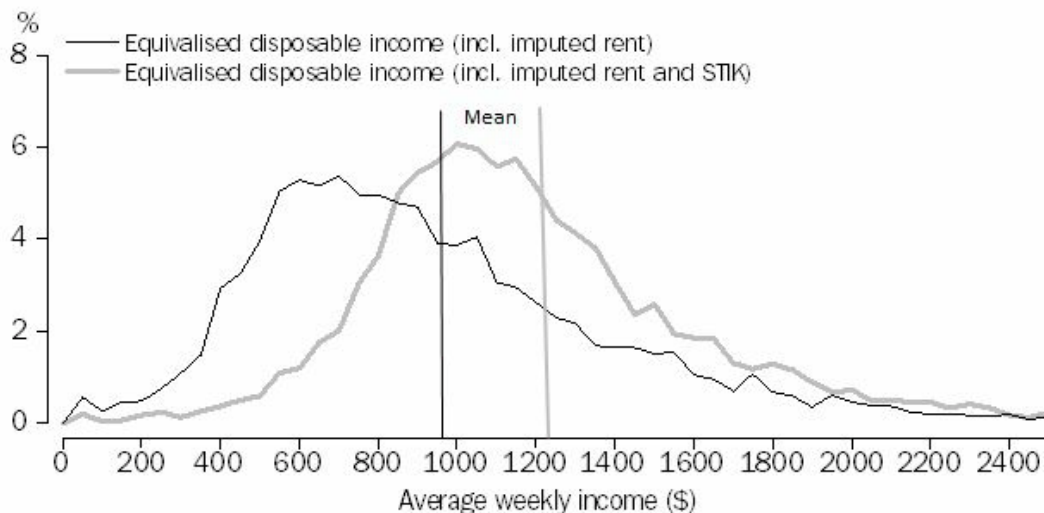
2. EQUIVALISED HOUSEHOLD INCOME^(a), 2011-12 ^(a)

		Equivalised private income (incl. imputed rent)	Equivalised disposable income (incl. imputed rent)	Equivalised disposable income (incl. imputed rent and STIK)
Mean income per week	\$	1 038	970	1 220
Median income per week	\$	882	837	1 106
Income share				
Lowest quintile	%	2.6	8.2	11.0
Second quintile	%	10.1	13.2	15.3
Third quintile	%	17.0	17.3	18.1
Fourth quintile	%	24.4	22.6	21.7
Highest quintile	%	45.9	38.7	33.9
All persons	%	100.0	100.0	100.0
Second and third deciles	%	6.3	11.2	13.8
Ratio of incomes at top of selected percentiles				
P90/P10	ratio	14.48	3.73	2.49
P80/P20	ratio	4.70	2.35	1.76
P80/P50	ratio	1.74	1.53	1.35
P20/P50	ratio	0.37	0.65	0.77
Gini coefficient	no.	0.433	0.303	0.226

(a) Imputed rent excludes government subsidised housing which is treated as a social transfer in kind

This equalising effect of including STIK in income analysis is also illustrated in the frequency distribution in Graph 3. Mean weekly equivalised disposable household income including imputed rent, rose from \$970 to \$1,220 with the addition of STIK.

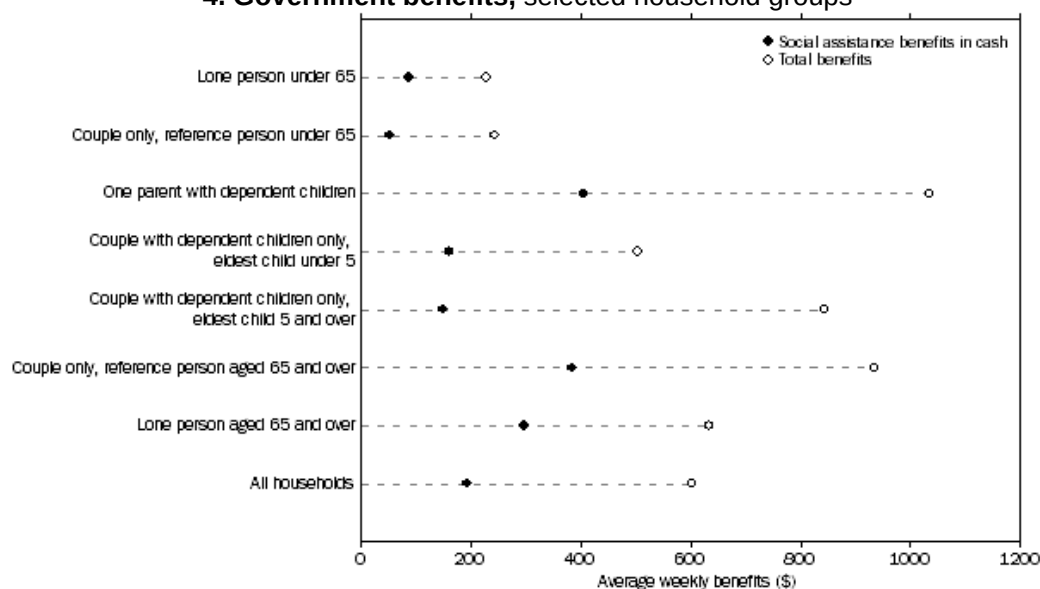
3. DISTRIBUTION OF EQUIVALISED HOUSEHOLD INCOME WITH AND WITHOUT STIK—2011–12



DIFFERENCES BETWEEN HOUSEHOLD GROUPS

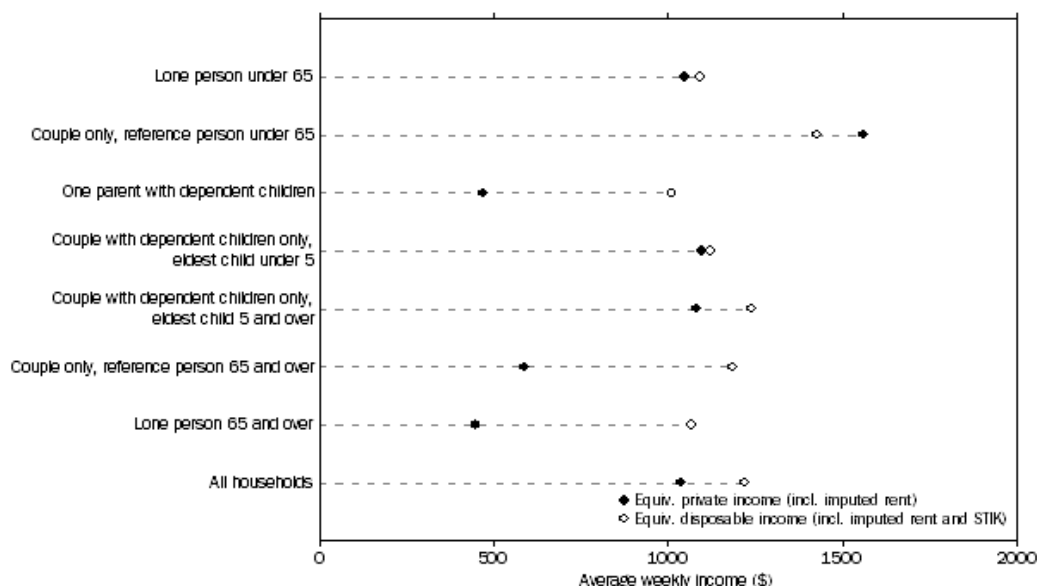
The system of government benefits and taxes in Australia has been designed to assist those in the community who are most in need of financial support. The allocation of benefits and income taxes paid differs between households, reflecting that characteristics such as household composition, life cycle stage, household size and income have an impact on these allocations. One parent families with dependent children, and couple only households where the reference person was 65 years and over received the highest average weekly levels of total social assistance benefits (\$1,035 and \$934, respectively). Couple only households and lone person households, with reference person under 65 years received the lowest average benefits in both cash and STIK, reflecting their relatively lower use, on average, of education, health, and social security and welfare services (Graph 4).

4. Government benefits, selected household groups



Graph 5 shows the impact of government benefits and income tax levels on different household types after taking account of household size and composition. One parent households with dependent children and couples and lone person households where the reference person was 65 years and over, had the lowest equivalised private income including imputed rent of all the household groups. However, the net effects of benefits and taxes increased their average equivalised incomes to \$1,011, \$1,185 and \$1,065 per week, respectively.

5. Equivalised household income, selected household groups



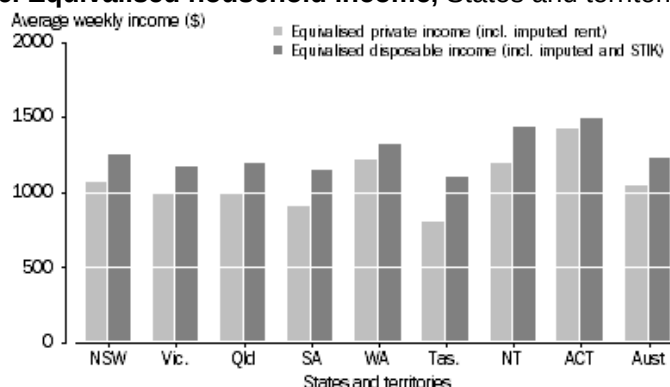
STATES AND TERRITORIES

The allocation of government benefits and income taxes paid varies across states and territories (Graph 6).

Estimates of STIK by state and territory may not be entirely accurate, since for some components the allocation does not take into account the varying expenditure by state and territory governments. In addition, there may be some inconsistencies in the classification of government expenditure by state governments in the source data, which could impact on comparability.

Average private income including imputed rent was highest in the ACT and WA in 2011-12. In Tasmania, which had the lowest average income, equivalised private income including imputed rent was 22% below the Australian average, however equivalised disposable income including imputed rent and STIK was only 10% below the Australian average, reflecting the net benefits received by Tasmanian households.

6. Equivalised household income, States and territories



CHANGES OVER TIME

In 2011-12, average total social assistance benefits in cash and STIK increased in real terms compared to the previous study in 2009-10 using the HES. Average government cash payments to all households increased by 3% (to \$193) while STIK increased by 9% (to \$409) in the two year period.

In the 2003-04 and 2009-10 HES studies, the most extensive concept of income used was final income which is equal to household disposable income plus STIK, less taxes on production. Final income is not able to be estimated in 2011-12, but has been included in tables 7 and 8 for comparative purposes.

7. AVERAGE WEEKLY HOUSEHOLD INCOME, Benefits and taxes

	\$	\$	\$
Private income (incl. imputed rent)	1 363	1 701	1 754
Social assistance benefits in cash(c)			
Age pensions	62	77	77
Disability and carer payments	29	34	39
Family support payments	51	49	51
Unemployment and study payments	19	18	17
Other government pensions and allowances	11	8	9
<i>Total social assistance benefits in cash</i>	<i>171</i>	<i>187</i>	<i>193</i>
Gross income (incl. imputed rent)	1 534	1 889	1 948
Taxes on income	266	274	297
Disposable income (incl. imputed rent)	1 268	1 614	1 651
Selected social transfers in kind			
Education benefits			
School education	78	88	86
Tertiary education	27	29	33
Other education benefits	5	7	8
<i>Total education benefits</i>	<i>109</i>	<i>123</i>	<i>126</i>
Health benefits			
Acute care institutions	57	79	79
Community health services	49	55	59
Pharmaceuticals	18	23	27
Private Health Insurance Rebate	na	11	13
Other health benefits	17	23	28
<i>Total health benefits</i>	<i>141</i>	<i>191</i>	<i>205</i>
Social security and welfare benefits			
Child care assistance	5	8	10
Other social security and welfare benefits	39	49	61
<i>Total social security and welfare benefits</i>	<i>44</i>	<i>57</i>	<i>71</i>
Housing benefits	4	5	5
Electricity concessions	na	1	1
Total selected social transfers in kind	298	377	409
Disposable income (incl. imputed rent and STIK)	1 566	1 991	2 060
Selected taxes on production(d)	184	193	na
GST component in total selected taxes on production	67	68	na
Final income	1 382	1 797	na
Total benefits allocated	469	564	603
Equivalised private income (incl. imputed rent)	817	1 006	1 038
Equivalised disposable income (incl. imputed rent)	756	948	970
Equivalised disposable income (incl. imputed rent and STIK)	1 079	1 180	1 220
Equivalised final income	835	1 067	na

na not available

(a) In 2011-12 dollars adjusted using changes in the Consumer Price Index. 2003-04 and 2009-10 data are from the Household Expenditure Survey

(b) Income estimates from 2003-04 are not directly comparable with estimates for 2009-10 and 2011-12 due to improvements made to measuring income

(c) Excludes overseas pensions

(d) Includes GST component

Between 2009-10 and 2011-12, the distribution of household income became more equal for all measures of household income shown in Table 8. The Gini coefficient for equivalised disposable household income including imputed rent and STIK decreased by 4% between 2009-10 and 2011-12 to 0.226.

8. GINI COEFFICIENT, by equivalised household income (a)

	2003-04 no.	2009-10 no.	2011-12 no.	Change from 2009-10 to 2011-12 %
Equivalised private income (incl. imputed rent)	0.432	0.442	0.433	-2.0
Equivalised disposable income (incl. imputed rent)	0.286	0.313	0.303	-3.1
Equivalised disposable income (incl. imputed rent and STIK)	0.209	0.236	0.226	-4.2
Equivalised final household income	0.224	0.245	na	na

na not available

(a) Income estimates from 2003-04 are not directly comparable with estimates from 2009-10 and 2011-12 due to improvements made to measuring income

Information reported in the 2011-12 SIH has been used as the basis for allocating government STIK to households based on the composition of households and the characteristics of their members. ABS Government Finance Statistics (GFS) were the main source for valuing the cost to government of the provision of STIK. The total value of STIK was defined as Commonwealth, state or territory and local government expenses, net of intra-government transfers, minus personal benefit payments paid in cash minus government revenue from the sale of goods and services.

Estimates for household private income including imputed rent, gross income and disposable income were compiled from either reported or modelled estimates routinely derived from the SIH. Estimates for STIK in this study have been modelled, where possible, using the same methodologies as used for the 2009-10 fiscal incidence study. The results of the 2009-10 study are published in **Government Benefits, Taxes and Household Income, Australia 2009-10** (cat. no. 6537.0). Appendix 4 in that publication explains the detailed methodologies used to allocate STIK to specific households. Comparable methods were used in respect of the 2011-12 SIH data for all items except the allocation of some health and education benefits as outlined in the summary below.

Social transfers in kind

Government STIK were imputed for the provision of education, health, housing, child care, electricity concessions and other social security and welfare services.

Education benefits

STIK were allocated for school education, tertiary education and other education benefits. Data on average expenditure by type of student were obtained from the Report on Government Services (ROGS) or the Department of Education, Employment and Workplace Relations. The value of education benefits received by members of individual households was allocated based on reported characteristics and summed to the household level. In the 2011-12 SIH, attendance at educational institutions was collected only for members of households aged 15 years and over. This included the type of institution attended, e.g. secondary school or university as well as whether the institution was a public or private institution such as schools run by the Catholic church or other private organisations. Unlike the HES 2009-10 study, no information was collected on the type of educational institution attended by children under 15 years. Therefore, it was only possible to allocate average benefits based on the level of school attended from the SIH (preschool, primary or secondary school), for children under 15. Data was available on whether children attended preschool. Children aged 5 to 12 years (excluding 5 year olds who were attending preschool) were assumed to attend primary school and those 13 or 14 years were assumed to attend secondary school.

Of the \$58.0 billion expenditure on education available for allocation to households, \$57.0 billion (98%) was allocated.

Health benefits

Health benefits were allocated for acute care institutions, community health services, pharmaceuticals, the Private Health Insurance Rebate (PHIR) and other health benefits (public health services, health research and health administration n.e.c.). Except for the PHIR, these benefits were, in general, allocated to households according to an insurance premium approach. Instead of allocating benefits according to actual use of health services over a relatively short period of time (which implies that benefits increase with short term ill health), members of the SIH population were allocated benefits according to the average utilisation rates for their age, sex and state or territory of residence groups. A higher utilisation rate was applied for people with a disability or long term health condition. This higher utilisation rate was estimated using data on the frequency of general practitioner visits collected in the ABS 2007-08 National Health Survey. In the HES 2009-10 study, all persons aged 15 years and over were asked whether they had a disability or long term health condition. In the 2011-12 study, this information was not available and only persons receiving a disability support pension were allocated the higher utilisation rate.

The PHIR is a rebate on private health insurance costs for members of a registered health fund. In the HES 2009-10 study, the PHIR was allocated to households that recorded expenditure on private health insurance. In the 2011-12 study, amount of expenditure was not available. The PHIR was therefore modelled based on the number of persons in the household that reported having private hospital cover. No

information was available on whether households had 'extras only' private health cover. To account for this possibility, a small amount of PHIR was allocated in the 2011-12 study to all households that reported having no private hospital cover.

Another difference between the 2009-10 and 2011-12 studies was use of concession card information to allocate higher pharmaceutical benefits to concession card holders. In the 2009-10 HES study, data was collected on whether any household member, including children, held a concession card. In the 2011-12 study, concession cards were allocated to persons 15 years and over based on the eligibility criteria for government pensions or allowances received. Children under 15 years were allocated a concession card if a person 15 years or over in the income unit had a concession card.

Of \$93.0 billion of health expenditure available for allocation to households, \$92.3 billion (99%) was allocated.

Social security and welfare benefits

Government benefits were allocated for child care assistance and for all other social security and welfare benefits in kind. Child care assistance was modelled at the income unit level depending on the number of children in formal care, the reported hours of care and the relevant income thresholds and tapers that are applied.

Government expenses relating to other social security and welfare programs, other than expenditure on direct cash payments, child care and residential aged care, were allocated to persons who received social security and welfare benefits. Average STIK for different types of benefit recipients (such as family and child related recipients, age related recipients and disability support recipients) were calculated by dividing the GFS expenses for each category of expenditure by the number of recipients.

Of \$33.6 billion of child care and other social security and welfare expenditure available for allocation to households, \$31.9 billion (95%) was allocated. Expenditure on residential aged care has been excluded from these totals.

Housing benefits

Housing benefits were allocated to households in government rental accommodation according to the estimated value of rental subsidy that they received. The value of the subsidy was calculated as the difference between the estimated market rent for their dwelling if it were to be privately rented, less the actual rent paid by households. In total, \$2.3 billion was allocated.

A substantial government expense for housing relates to the purchase of new dwellings for future subsidised rental. These expenses were not allocated amongst SIH households since the study is focussed on STIK received during the reference period.

Electricity concessions

All state and territory governments provide concessions or rebates on electricity bills to certain households, typically those receiving some government cash benefits or allowances, or holders of some concession cards. In this study, government expenses for electricity concessions were allocated to eligible households according to the value of the concession in their state or territory of residence. In total, \$643 million was allocated.

Sampling variability (Appendix) (Appendix)

APPENDIX 5 SAMPLING VARIABILITY

INTRODUCTION

The estimates in this publication are based on information obtained from the occupants of a sample of

dwellings. Therefore, the estimates are subject to sampling variability and may differ from the population parameters that would have been observed if information had been collected for all dwellings.

One measure of the likely uncertainty is given by the standard error estimate (SE), which indicates the extent to which a sample estimate might have varied compared to the population parameter because only a sample of dwellings was included. There are about two chances in three that the sample estimate will differ by less than one SE from the population parameter that would have been obtained if all dwellings had been enumerated, and about 19 chances in 20 (the 95% confidence level) that the difference will be less than two SEs. Another measure of the likely difference is the relative standard error (RSE), which is obtained by expressing the SE as a percentage of the estimate.

For estimates of population sizes, the size of the SE generally increases with the level of the estimate, so that the larger the estimate the larger the SE. However, the larger the sampling estimate the smaller the SE becomes in percentage terms (the RSE). Thus, larger sample estimates will be relatively more reliable than smaller sample estimates.

Estimates in this publication with RSEs of 25% or less are considered reliable for many purposes. Estimates with RSEs greater than 25% but less than or equal to 50% are annotated by an asterisk to indicate they are subject to high SEs and should be used with caution. Estimates with RSEs greater than 50%, annotated by a double asterisk, are considered too unreliable for general use and should only be used to aggregate with other estimates to provide derived estimates with RSEs of less than 50%.

RSEs for all tables are provided. The RSEs have been derived using the delete-a-group jackknife method. If needed, SEs can be calculated using the estimates and RSEs.

COMPARATIVE ESTIMATES

Proportions and percentages

Proportions and percentages, which are formed from the ratio of two estimates, are also subject to sampling errors. The size of the error depends on the accuracy of both the numerator and the denominator. For proportions where the denominator is an estimate of the number of households in a grouping and the numerator is the number of households in a sub-group of the denominator group, the formula for an approximate RSE is given by:

$$RSE\left(\frac{x}{y}\right) = \sqrt{[RSE\%(x)]^2 + [RSE\%(y)]^2}$$

The RSE estimates for proportions listed in the publication fully calculate the effect of correlation between the numerator and the denominator.

Differences between estimates

The difference between survey estimates is also subject to sampling variability. An approximate SE of the difference between two estimates (x-y) may be calculated by the formula:

$$SE(x-y) = \sqrt{[SE(x)]^2 + [SE(y)]^2}$$

This approximation can generally be used whenever the estimates come from different samples, such as two estimates from different years or two estimates for two non-intersecting subpopulations in the one year. If the estimates come from two populations, one of which is a subpopulation of the other, the standard error is likely to be lower than that derived from this approximation.

SIGNIFICANCE TESTING

For comparing estimates between surveys, or between populations within a survey, it is useful to determine whether differences are 'real' differences between the corresponding population characteristics or simply the result of sampling variability. One way to examine this is to determine whether the difference between the estimates is statistically significant. This is done by calculating the standard error of the difference between two estimates (x and y), using the formula above, and using that to calculate the test statistic using the formula below.

$$\frac{|x-y|}{SE(x-y)}$$

If the value of this test statistic is greater than 1.96 (at the 95% confidence level) then there is good evidence of a statistically significant difference between the two population estimates with respect to that characteristic. Otherwise, it cannot be stated with confidence (at the 95% confidence level) that there is a real difference between the population estimates.

Comparison of income between SIH and the Australian System of National Accounts (Appendix)

APPENDIX 6 COMPARISON OF INCOME BETWEEN SIH AND THE AUSTRALIAN SYSTEM OF NATIONAL ACCOUNTS

INTRODUCTION

This publication contains estimates of the income of Australian households from data collected in the Survey of Income and Housing (SIH). The SIH estimates of income are compiled from information collected from individual households, and are used to analyse the distribution of household income across the population and to compare levels of income between various population subgroups. These analyses support the development, implementation and evaluation of social and economic policies, including the effects of the tax and transfer systems, particularly for potentially disadvantaged groups such as pensioners, one-parent families and the unemployed. The results also assist in planning services (e.g. health, housing, disability, child care, education, aged care), and have wide application in business planning, especially in the housing and retail sectors.

The Australian System of National Accounts (ASNA) also provides estimates of income for the household sector as a whole. The ASNA estimates of income are compiled from many sources, most of which do not provide information for different population subgroups within the household sector. The ASNA is designed to provide a systematic summary of economic activity of the Australian economy and to present a statistical picture of the structure of the economy and the detailed processes that make up domestic production and its distribution. Within the national accounting framework, the data show how the household sector relates to the corporate and government sectors in Australia and enables comparison with the rest of the world.

As the SIH and ASNA estimates of household income have been developed for different purposes, there are a number of differences in the resulting estimates of income. This appendix compares income data from the two collections and describes and quantifies some of the main scope, definitional and methodological differences between them.

Data used in comparisons

Income data from the SIH and ASNA are presented for the nine financial years from 2003-04 to 2011-12 for comparison across the two systems (Tables A6 and A7).

The SIH is conducted biennially and enumerated over a 12 month period so that the estimates of 'current' income, that is estimates of usual income being received at the time the data were collected from respondents, are representative of income patterns across the 'current' financial year. Estimates for 2003-04, 2005-06, 2007-08, 2009-10, and 2011-12 (SIH years) relate to 'current' financial year income.

The SIH also collects full year, or annual income with respect to the 'previous' financial year. Estimates for 2004-05, 2006-07, 2008-09, and 2010-11 relate to 'previous' financial year income.

Current income estimates provide the most accurate information for analysis of total income and its distribution. However, data for current year income and previous year income are compared with the annual ASNA estimates.

The ASNA is compiled quarterly and annually from many data sources, mostly statistical surveys or as by-products of government administrative processes. As only aggregate information is needed, use can be

made of partial data sources and imputation. In some cases, there may be a reliable estimate for the whole economy, but less reliable indicators or assumptions are used to disaggregate the economy wide estimate into estimates for sectors of the the economy, such as those relating to the government, households and corporate entities. Some estimates are based on data collections that are only conducted occasionally, with estimates interpolated and extrapolated. For these reasons, initial estimates are often revised as later or more comprehensive data become available. Details are available in **Australian National Accounts: Concepts, Sources and Methods** (cat. no. 5216.0).

The unadjusted ASNA estimates of income in this appendix are those from Tables 46, 47, 59 and 60 in the publication **Australian System of National Accounts, 2011-12** (cat. no. 5204.0). This appendix also uses unpublished estimates from ASNA to better align ASNA and SIH concepts.

SIH and ASNA income estimates in this appendix include social transfers in kind (STIK), which have been added to total income at household level (SIH) and national level (ASNA). Social transfers in kind are non-cash benefits and services provided by the government to households for education, health, social security and welfare, and electricity concessions and rebates. They include reimbursements of approved expenditure, such as the Child Care Rebate. The STIK estimates in 2011-12 are the first STIK estimates generated from SIH households, previous STIK estimates in 2003-04 and 2009-10 were produced from fiscal incidence studies which were conducted on households in the Household Expenditure Survey in those years.

A6. SIH ESTIMATES OF ANNUAL HOUSEHOLD INCOME^(a)

	2003-04 \$b	2004-05 \$b	2005-06 \$b	2006-07 \$b	2007-08 \$b	2008-09 \$b	2009-10 \$b	2010-11 \$b	2011-12 \$b
Reported income									
Wages and salaries ^(b)	341.7	387.2	402.1	461.0	513.1	525.5	546.6	591.6	615.4
Government pensions and allowances									
Australian governments pensions and allowances	55.0	50.5	59.5	51.6	64.6	75.8	77.9	73.0	87.4
Overseas governments pensions and allowances	1.3	1.4	1.5	1.0	1.3	1.3	1.5	1.3	1.4
<i>Total government pensions and allowances</i>	56.3	52.0	61.1	52.6	65.9	77.1	79.3	74.4	88.7
Profit or loss from own unincorporated business	31.2	35.8	39.4	37.4	40.7	34.7	40.5	37.4	46.4
Investment income									
Interest ^(c)	5.3	7.5	7.5	9.5	9.4	12.1	9.3	14.4	13.7
Dividends from own incorporated businesses	6.8	6.9	9.9	5.9	10.1	7.4	12.6	5.5	7.5
Dividends from shares	5.5	8.6	8.8	9.3	9.6	8.0	7.8	8.0	8.2
Distributions from trusts									
Public unit trusts ^(d)	na	na	na	1.1	1.3	1.1	1.2	1.1	1.1
Other trusts ^(d)	na	na	na	7.5	12.7	8.5	9.0	10.2	9.9
<i>Total trusts</i>	2.5	3.7	3.7	8.6	14.0	9.6	10.3	11.3	11.0
Silent partner income ^(d)	na	na	na	1.2	1.3	0.7	0.7	0.2	1.0
Profit or loss from residential property	0.3	-1.3	-1.3	-1.3	-1.1	-2.9	-2.0	-3.6	-2.9
Profit or loss from non-residential property	1.8	2.0	1.9	1.2	1.2	1.4	1.1	2.5	2.7
Other financial investments ^(e)	0.3	0.4	0.4	1.4	0.6	0.7	0.6	0.8	1.0
<i>Total investment income</i>	22.5	27.9	31.0	35.8	45.2	37.0	40.5	39.1	42.3
Other income									
Superannuation and life insurance pensions	13.2	12.8	14.3	17.4	20.6	20.4	22.0	23.0	25.6

Workers' compensation	0.7	0.9	0.8	1.0	1.3	1.2	1.3	2.1	1.7
Income from persons not living in the household	3.0	2.7	3.2	5.5	8.3	6.5	8.0	7.1	9.2
Other income nec	0.8	1.0	1.5	1.7	1.4	1.5	2.0	3.2	2.9
<i>Total other income</i>	<i>17.7</i>	<i>17.4</i>	<i>19.7</i>	<i>25.6</i>	<i>31.6</i>	<i>29.6</i>	<i>33.3</i>	<i>35.5</i>	<i>39.4</i>
Total reported income	469.5	520.2	553.3	612.5	696.5	703.8	740.2	777.9	832.3
Imputed income									
Net imputed rent from owner-occupied dwellings(f)	23.8	24.5	25.1	27.4	29.6	35.2	40.7	40.5	40.3
Total income	493.2	544.7	578.4	639.8	726.1	739.0	781.0	818.5	872.6
STIK(g)	96.1	na	na	na	na	na	156.3	na	184.1
Total income plus STIK	589.3	na	na	na	na	na	937.3	na	1 056.7

na not available

(a) Estimates for 2004-05, 2006-07, 2008-09, and 2010-11 were derived from income data reported for the previous financial year in SIH 2005-06, SIH 2007-08 SIH, 2009-10, and SIH 2011-12, respectively

(b) Salary sacrificed income and non-cash benefits were imputed in 2004-05, 2006-07, 2008-09, and 2010-11

(c) Includes interest from offset accounts enumerated separately in 2011-12

(d) Public unit trust, other trust and silent partner income were collected but are not available separately in 2003-04, 2004-05 and 2005-06

(e) Includes royalties

(f) Net imputed rent in SIH years is modelled based on dwelling characteristics for sampled households. For 2004-05, 2006-07, 2008-09, and 2010-11, net imputed rent is the average of net imputed rent for the year before and after the given year. For example, the 2004-05 value of \$24 billion is the average of 2003-04 and 2005-06

(g) Social transfers in kind are not available for 2004-05 to 2008-09, nor in 2010-11

A7 ASNA ANNUAL HOUSEHOLD INCOME

	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
	\$b	\$b	\$b	\$b	\$b	\$b	\$b	\$b	\$b
Primary income									
Gross operating surplus - dwellings owned by persons	54.6	56.3	59.2	65.2	75.9	83.9	91.2	97.2	101.7
Gross mixed income	76.3	76.8	72.5	88.3	91.8	90.2	99.9	121.2	118.3
Compensation of employees									
Wages and salaries	369.7	400.3	430.8	470.0	512.1	529.9	548.6	588.4	630.4
Employers' social contributions	42.7	46.7	51.0	56.2	61.3	63.5	65.9	70.9	76.0
<i>Total compensation of employees</i>	<i>412.5</i>	<i>447.0</i>	<i>481.8</i>	<i>526.2</i>	<i>573.4</i>	<i>593.4</i>	<i>614.6</i>	<i>659.3</i>	<i>706.4</i>
Property income									
Interest(a)	18.6	21.2	23.1	28.2	35.0	34.7	34.2	40.6	41.6
Imputed interest	32.8	36.8	43.2	48.7	60.5	62.3	65.6	74.0	76.1
Dividends	16.2	18.9	21.4	25.7	27.3	27.5	25.8	29.0	31.2
Reinvested earnings	-	-0.2	-0.2	0.1	-0.3	-0.5	0.1	0.3	0.3
Rent on natural assets	-	-	-	-	-	-	-	-	-
<i>Total property income</i>	<i>67.6</i>	<i>76.6</i>	<i>87.6</i>	<i>102.8</i>	<i>122.4</i>	<i>124.0</i>	<i>125.8</i>	<i>143.9</i>	<i>149.3</i>
Total primary income	611.0	663.0	713.7	786.3	855.7	889.6	925.0	1 021.6	1 075.6
Secondary income									
Workers' compensation	7.0	8.0	4.8	6.3	6.2	7.9	8.9	9.4	9.8
Social assistance benefits	72.7	75.1	78.0	82.7	87.2	112.8	100.8	103.8	113.5
Non-life insurance claims	17.4	19.5	21.0	21.1	22.5	25.4	27.3	29.1	30.6
Current transfers to non-profit institutions	13.7	14.8	17.2	19.1	21.0	24.0	29.9	28.4	29.6
Other current transfers	3.2	3.3	3.4	3.8	3.8	4.0	3.8	3.9	3.9
Total secondary income	114.0	120.7	124.5	132.9	140.8	174.1	170.8	174.6	187.4
Total gross income	725.0	783.7	838.2	919.2	996.5	1 063.8	1 095.8	1 196.3	1 263.0
STIK	92.0	100.9	105.6	114.7	123.6	136.3	144.0	151.3	157.9
Total gross income plus STIK	817.1	884.6	943.8	1 033.9	1 120.1	1 200.1	1 239.8	1 347.5	1 420.9

- nil or rounded to zero (including null cells)

(a) Interest includes the cost of financial intermediation services indirectly measured (FISIM)

SCOPE AND MEASUREMENT DIFFERENCES

There are a number of scope and measurement differences that can be quantified between the SIH and ASNA household income systems (Table A8).

The SIH estimates of household income include two components which are not included in the income attributed to the household sector in the ASNA. Firstly, the SIH estimate includes the payments households

receive from superannuation, annuities or private pensions (\$25.6 billion in 2011-12), whereas the ASNA includes the imputed income, such as from interest and dividends, earned by superannuation funds on behalf of their members (part of 'Imputed interest' in Table A8). Secondly, the SIH estimate includes financial support from persons not living in the household (\$10.6 billion in 2011-12), whereas in the ASNA, sectoral accounts transfers from one household to another within Australia's economic territory are recorded on a net basis, thus they are assumed to net out to zero across all households.

The ASNA household sector estimates of income also include some components which are not included in the SIH measure. The components of the \$240.8 billion adjustment that was subtracted from the ASNA aggregate in 2011-12 were:

- employers' social contributions, that is the compulsory contributions payable by employers to secure social benefits for their employees, such as superannuation contributions and workers' compensation premiums (\$76.0 billion);
- imputed interest, which includes the investment income of insurance enterprises, superannuation funds and investment funds attributable to policyholders, as well as imputed interest on government unfunded superannuation arrangements (\$76.1 billion);
- non-life insurance claims (\$30.6 billion);
- government transfers to non-profit institutions serving households (NPISHs) such as churches and charities (\$29.6 billion);
- FISIM on interest received, that is the imputed value of the services provided by financial institutions to depositors (\$13.0 billion);
- The Child Care Benefit and the Private Health Insurance Rebate, treated as STIK in SIH (\$8.2 billion); and
- the imputed reinvested earnings from undistributed investment fund and foreign direct investment income (\$0.3 billion).

There are also quantifiable differences in the measurement of income from housing and operations of unincorporated enterprises. In the SIH, a much broader range of housing and business expenses are deducted in calculating income. To better align the scope of the two measures an adjustment, for 2011-12, of \$118.9 billion of net expenses from housing and operations of unincorporated business was deducted from the ASNA aggregate.

After adjusting for the quantifiable differences shown in Table A8, the alignment of SIH and ASNA aggregates is improved. In 2011-12, the adjusted SIH income was \$834.4 billion compared with adjusted ASNA income of \$910.4 billion. However, there are two remaining scope differences which cannot be easily quantified. The SIH excludes both people living in non-private dwellings and people living in very remote regions of Australia. It is estimated that this excludes approximately 3% of people living in Australia. The ASNA household sector estimates also include the activity of NPISHs. While government transfers to NPISHs can be quantified, other income received by NPISHs such as transfers from the corporate sector, investment income and income from the sale of goods and services cannot be separately identified for all years presented in tables. In total, NPISHs are estimated to contribute up to 5% to total ASNA household sector income.

In addition to the income quantified in the Household Income Account (ASNA) and Total current weekly income (SIH), both ASNA and SIH quantify social transfers in kind (STIK). Social transfers in kind are non-cash benefits and services provided by government to households at no cost. The SIH treats reimbursements for approved expenditure (such as the Child Care Rebate, Child Care Benefit, and Private Health Insurance Rebate) as social transfers in kind. ASNA defines some government benefits, like the Private Health Insurance Rebate (PHIR) and Child Care Benefit (CCB), as cash government pensions and allowances (and are recorded under 'Social assistance benefits'). To more closely align the definitions between ASNA and SIH, annual estimates for government expenditure on PHIR and CCB are subtracted from the unadjusted total gross income in ASNA, and then added to the ASNA treatment of social transfers in kind. Some scope differences remain, however. As previously discussed, excluded from the SIH estimates are households in very remote regions, and all persons living in non-private dwellings. However, SIH estimates include amounts from health, social security and welfare administration and services that are excluded from the ASNA estimate of STIK. The ASNA estimate also includes some benefits not relatable to the private households in scope of SIH, such as expenditure on institutional aged care.

A8 ADJUSTMENT FOR SELECTED SCOPE AND MEASUREMENT DIFFERENCES

SIH items(a)										
Total income(b)	\$b	493.2	544.7	578.4	639.8	726.1	739.0	781.0	818.5	872.6
Less										
Superannuation and life insurance pensions	\$b	13.2	12.8	14.3	17.4	20.6	20.4	22.0	23.0	25.6
Income from persons not living in the household	\$b	3.0	2.7	3.2	5.5	8.3	6.5	8.0	7.1	9.2
Other income	\$b	0.8	1.0	1.5	1.7	1.4	1.5	2.0	3.2	2.9
Adjusted SIH income	\$b	476.2	528.2	559.5	615.3	695.7	710.6	749.0	785.1	834.9
STIK	\$b	96.1	na	na	na	na	na	156.3	na	184.1
Adjusted SIH income plus STIK	\$b	572.3	na	na	na	na	na	905.3	na	1 019.0
ASNA items										
Total gross income	\$b	725.0	783.7	838.2	919.2	996.5	1 063.8	1 095.8	1 196.3	1 263.0
Less										
Employers' social contributions	\$b	42.7	46.7	51.0	56.2	61.3	63.5	65.9	70.9	76.0
Imputed interest	\$b	32.8	36.8	43.2	48.7	60.5	62.3	65.6	74.0	76.1
Non-life insurance claims	\$b	17.4	19.5	21.0	21.1	22.5	25.4	27.3	29.1	30.6
Current transfers to non-profit institutions(c)	\$b	13.7	14.8	17.2	19.1	21.0	24.0	29.9	28.4	29.6
FISIM on interest received	\$b	7.1	7.0	7.8	7.5	7.7	11.8	12.4	12.8	13.0
Social assistance benefits treated as STIK in SIH(d)	\$b	3.8	4.2	4.6	4.8	5.4	5.6	6.5	7.3	8.2
Reinvested earnings	\$b	-	-0.2	-0.2	0.1	-0.3	-0.5	0.1	0.3	0.3
Housing expenses to align ASNA income from dwellings to SIH basis	\$b	33.9	40.0	44.8	55.4	68.5	65.8	67.8	81.0	83.1
Business expenses to align ASNA gross mixed income to SIH basis	\$b	23.5	24.4	25.4	28.8	29.7	30.6	33.1	35.4	35.8
Adjusted ASNA income	\$b	550.0	590.7	623.4	677.6	720.2	775.1	787.1	857.0	910.4
Total social transfers in kind	\$b	95.8	105.0	110.1	119.5	129.0	141.9	150.5	158.6	166.1
Equals: Social transfers in kind	\$b	92.0	100.9	105.6	114.7	123.6	136.3	144.0	151.3	157.9
Plus: Social assistance benefits treated as STIK in SIH	\$b	3.8	4.2	4.6	4.8	5.4	5.6	6.5	7.3	8.2
Adjusted ASNA income plus Total STIK	\$b	645.8	695.7	733.6	797.0	849.2	917.0	937.6	1 015.6	1 076.4
Adjusted SIH as a percent of adjusted ASNA	%	86.6	89.4	89.7	90.8	96.6	91.7	95.2	91.6	91.7
Adjusted SIH plus STIK, as a percent of adjusted ASNA plus Total STIK	%	88.6	na	na	na	na	na	96.6	na	94.7

- nil or rounded to zero (including null cells)

na not available

(a) Estimates for 2004-05, 2006-07, 2008-09, and 2010-11 were derived from income data reported for the previous financial year in SIH 2005-06, SIH 2007-08, SIH 2009-10, and SIH 2011-12, respectively

(b) See footnotes in table A6 for calculation of SIH total income

(c) Includes transfers from general government and public non-financial corporations

(d) Includes the Private Health Insurance Rebate and Child Care Benefit

COMPARISON OF INCOME ITEMS

The following section compares selected individual sources of income in this publication with income items published in the ASNA, or source data available for those items.

Wages and salaries

The largest component of household income is wages and salaries. In SIH 2011-12, reported wages and salaries were \$615.4 billion or 69.8% of total income. This estimate includes workers' compensation received directly through the payroll (estimated at \$8.1 billion). It does not include any wages and salaries of people living in non-private dwellings or people living in very remote regions of Australia.

ASNA estimates of wages and salaries are mainly sourced from ABS quarterly and annual surveys of businesses. In ASNA 2011-12, wages and salaries were \$630.4 billion. It is expected that the ASNA estimate of wages and salaries for 2011-12, and possibly earlier years, may be revised as more complete data become available, in particular annual survey data.

Table A9 shows that wages and salaries in SIH and ASNA are closely aligned. The ASNA estimates for 2009-10 and earlier years have been revised from the previous estimates shown in the 2009-10 edition of this publication.

A9 WAGES AND SALARIES

	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
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SIH items(a)										
Reported wages and salaries	\$b	341.7	387.2	402.1	461.0	513.1	525.5	546.6	591.6	615.4
Less: Workers' compensation received through payroll(b)	\$b	6.3	7.2	4.1	5.2	5.0	6.7	7.6	7.2	8.1
Wages and salaries	\$b	335.4	380.0	398.0	455.8	508.1	518.8	539.0	584.4	607.3
ASNA item										
Wages and salaries	\$b	369.7	400.3	430.8	470.0	512.1	529.9	548.6	588.4	630.4
SIH as a percent of ASNA	%	90.7	94.9	92.4	97.0	99.2	97.9	98.2	99.3	96.3

(a) Estimates for 2004-05, 2006-07, 2008-09, and 2010-11 were derived from income data reported for the previous financial year in SIH 2005-06, SIH 2007-08, SIH 2009-10, and SIH 2011-12, respectively

(b) Estimated as ASNA workers' compensation estimates less the separately reported workers' compensation payments collected in the SIH

Australian government pensions and allowances

In the SIH, government pensions and allowances paid to Australian residents in private dwellings are collected. These estimates mainly comprise age and disability pensions, carers' and youth allowances, family tax benefits and other payments administered by Centrelink, the Department of Veterans' Affairs, and the Family Assistance Office.

The related item in the ASNA is 'social assistance benefits' sourced from ABS government finance statistics which are compiled from data provided by individual government agencies to the Department of Finance and Deregulation, and state government treasuries. The scope of these payments is broader than those collected in the SIH as they include the Private Health Insurance Rebate, the Child Care Benefit, some education related payments made to parents to offset the cost of educating their children, and many other one-off or irregular payments made by various state and Commonwealth agencies.

In 2011-12, Australian government pensions and allowances in the SIH were \$87.4 billion, which was lower than the ASNA estimate (\$98.3 billion) after adjusting for payments treated as social transfers in kind in the SIH. The SIH estimates do not include pensions and allowances received by people living in non-private dwellings (e.g. nursing homes), nor by people living in very remote areas of Australia.

The large increase in the ASNA estimate in 2008-09 reflects the economic stimulus payments the Commonwealth government paid in that year. This is not fully reflected in the SIH estimate. As Table A10 indicates, the value of SIH pensions and allowances based on reporting of 'previous' financial year income were consistently lower than the reported 'current' financial year estimate when compared to the ASNA data. The lower 'previous' financial year estimate reflects the potential omission of supplementary or smaller payments and possible part year effects in the previous year.

A10 AUSTRALIAN GOVERNMENT PENSIONS AND ALLOWANCES

		2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
SIH item(a)										
Australian governments pensions and allowances	\$b	55.0	50.5	59.5	51.6	64.6	75.8	77.9	73.0	87.4
ASNA item										
Australian governments pensions and allowances	\$b	68.9	70.9	73.4	77.9	81.9	107.2	94.4	96.6	105.3
Equals: Social assistance benefits	\$b	72.7	75.1	78.0	82.7	87.2	112.8	100.8	103.8	113.5
Less: Social assistance benefits treated as STIK in SIH(b)	\$b	3.8	4.2	4.6	4.8	5.4	5.6	6.5	7.3	8.2
SIH as a percent of ASNA	%	79.9	71.3	81.1	66.2	78.9	70.7	82.5	75.6	82.9

(a) Estimates for 2004-05, 2006-07, 2008-09, and 2010-11 were derived from income data reported for the previous financial year in SIH 2005-06, SIH 2007-08, SIH 2009-10, and SIH 2011-12, respectively

(b) Includes the Private Health Insurance Rebate and Child Care Benefit

Net business income

In the ASNA, income from production by unincorporated enterprises is referred to as gross mixed income (GMI), and is measured as income from production less intermediate consumption. Intermediate consumption consists of the value of the goods and services consumed as inputs to the production

process. Other costs normally expensed in business accounts, such as interest payable on loans and depreciation are not deducted. The ASNA estimates of GMI are compiled mainly from the business tax returns of sole proprietors, partnerships and private trusts. Royalties and income from non-residential property are included in GMI.

The SIH collects the profit or loss from unincorporated businesses from working sole proprietors and partners. The income earned by silent partners and non-working beneficiaries of businesses and other trusts is collected separately and included in investment income. To align with the ASNA concept of unincorporated business income, these sources of income, along with non-residential property income and royalties have been included in net business income for comparison purposes, in Table A11.

Table A11 shows the individual items that relate to net business income for both ASNA and SIH. The SIH income from these selected items was \$60.5 billion in 2011-12, compared to the ASNA estimate of \$82.5 billion after adjusting GMI to remove business expenses not deducted. The higher income in ASNA may be partly due to the different classification between the ASNA and the SIH of some businesses that have a trust underlying their business operations, with the trustee listed as an incorporated entity. In the ASNA, these businesses would be classified as unincorporated enterprises whereas in the SIH, the business owners may report these businesses as incorporated enterprises (and their income included in dividend income).

The ASNA GMI estimate includes an adjustment to account for business under reporting to the Australian Taxation Office (ATO). It is possible that some households may also under report their business income in the SIH.

A11 NET BUSINESS INCOME

		2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
SIH items(a)										
Profit or loss from own unincorporated business	\$b	31.2	35.8	39.4	37.4	40.7	34.7	40.5	37.4	46.4
Profit or loss from non-residential property	\$b	1.8	2.0	1.9	1.2	1.2	1.4	1.1	2.5	2.7
Silent partner income(b)	\$b	na	na	na	1.2	1.3	0.7	0.7	0.2	1.0
Distributions from other trusts(b)(c)	\$b	na	na	na	7.5	12.7	8.5	9.0	10.2	9.9
Total selected SIH items(d)	\$b	33.2	37.9	41.4	47.5	56.1	45.6	51.5	50.7	60.5
ASNA items										
Total selected ASNA items	\$b	52.8	52.5	47.1	59.5	62.0	59.6	66.8	85.8	82.5
Equals: Gross mixed income	\$b	76.3	76.8	72.5	88.3	91.8	90.2	99.9	121.2	118.3
Less: Business expenses to align gross mixed income to SIH basis	\$b	23.5	24.4	25.4	28.8	29.7	30.6	33.1	35.4	35.8
SIH as a percent of ASNA	%	62.9	72.2	87.9	79.9	90.4	76.5	77.2	59.1	73.4

na not available

(a) Estimates for 2004-05, 2006-07, 2008-09, and 2010-11 were derived from income data reported for the previous financial year in SIH 2005-06, SIH 2007-08, SIH 2009-10, and SIH 2011-12, respectively

(b) Other trust and silent partner income were collected but are not available separately in 2003-04, 2004-05 and 2005-06

(c) Other trusts will include a small amount of income from non-business trusts such as inheritance trusts

(d) Includes royalties

Interest

In the SIH, interest income from bank accounts, debentures and bonds is collected. Interest from cash management trusts is also collected but is not able to be separately identified from income from public unit trusts, included in dividend income. For the 'current' year, respondents are asked to estimate their expected interest income in the financial year. For the 'previous' year, respondents are asked to report actual interest earned.

In the ASNA, interest estimates are derived from a large number of data sources by constructing matrices of the flows of interest receivable and payable between the various sectors and subsectors of the economy. To fully account for all income flows in the economy, the ASNA estimates of interest receivable include an imputed value of the services provided by financial institutions to depositors. This is referred to as financial intermediation services indirectly measured (FISIM) and has been deducted from the ASNA estimate for comparison with SIH data as households have a concept of net income from their investment in deposits, after subtracting both direct and imputed charges. The ASNA estimates also include interest earned by unincorporated businesses and NPISHs, which cannot be separately identified or quantified.

Personal taxation data published by the ATO provide another measure of interest earned by persons in Australia. This information is the aggregated total of gross interest income reported on individual tax returns. Like the SIH interest item, income from cash management trusts and interest earned by unincorporated businesses are reported separately. The ATO interest statistic does not include interest received by persons not required to complete an individual tax return.

A12 INTEREST

		2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
SIH item(a)										
Interest	\$b	5.3	7.5	7.5	9.5	9.4	12.1	9.3	14.4	13.7
ASNA items										
Interest receivable (excluding FISIM)	\$b	11.5	14.2	15.3	20.7	27.3	22.9	21.8	27.8	28.7
Equals: Interest (including FISIM)	\$b	18.6	21.2	23.1	28.2	35.0	34.7	34.2	40.6	41.6
Less: FISIM(b)(b)	\$b	7.1	7.0	7.8	7.5	7.7	11.8	12.4	12.8	13.0
ATO statistics(c)										
Interest	\$b	7.5	9.0	10.2	12.1	14.3	15.0	11.6	15.3	nya
SIH as a percent of ASNA	%	46.4	53.0	49.1	45.9	34.6	53.0	42.6	52.0	47.7

nya not yet available

(a) Estimates for 2004-05, 2006-07, 2008-09, and 2010-11 were derived from income data reported for the previous financial year in SIH 2005-06, SIH 2007-08, SIH 2009-10, and SIH 2011-12, respectively

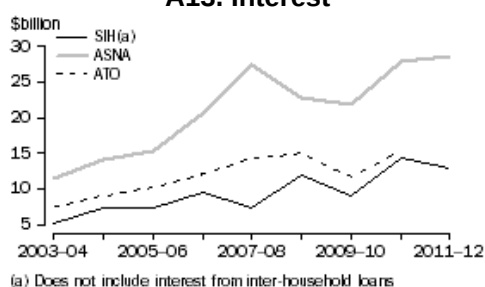
(b) Financial intermediation services indirectly measured

(c) Source: ATO, 2013

As shown in Graph A13, the SIH and ATO estimates align relatively closely. SIH estimates based on 'previous' year reporting (2004-05, 2006-07, 2008-09, and 2010-11) are closer to the ATO estimates than the estimates based on 'current' year reporting. This suggests that survey respondents provide a conservative estimate of expected interest in the SIH for the 'current' year, but a more accurate reporting of this income when actual interest earned is known.

The ASNA estimate of interest income, less FISIM, is substantially higher than both the SIH and ATO estimate in each year. The higher ASNA estimate of interest can be partly explained by the inclusion of interest received by unincorporated enterprises and NPISHs, and interest from cash management trusts.

A13. Interest



Dividends

In the SIH, dividend income comprises dividends from publicly listed companies and public unit trusts (such as equity, cash management and property trusts), as well as dividends paid to households from their own incorporated companies. Respondents are asked to include imputation credits when they report their income from dividends. In SIH 2007-08, improvements were made to the questionnaire to separately collect information about public unit trusts and other trusts. These changes significantly improved the coverage of trust income. For the years prior to 2006-07 when income from both public and private trusts was collected together, total trust income is shown in Table A14. From 2006-07, other trust income (from private trusts) is shown in net business income in Table A11.

The ASNA estimates of dividends are based on data provided by the ATO. These differ from the SIH estimates as they do not include imputation credits, nor do they include dividends from cash management trusts. The ASNA estimates also include dividends received by NPISHs.

As shown in Table A14, since 2006-07, dividend income from the SIH has been consistently lower than that estimated in the ASNA despite the inclusion in SIH of imputation credits. Some of this difference can be attributed to the scope exclusions in SIH and the inclusion of dividends received by NPISHs in the ASNA estimate.

		2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
SIH items(a)										
Dividends from own incorporated businesses	\$b	6.8	6.9	9.9	5.9	10.1	7.4	12.6	5.5	7.5
Dividends from shares	\$b	5.5	8.6	8.8	9.3	9.6	8.0	7.8	8.0	8.2
Distributions from trusts(b)	\$b	2.5	3.7	3.7	na	na	na	na	na	na
Distributions from public unit trusts(b)	\$b	na	na	na	1.1	1.3	1.1	1.2	1.1	1.1
Dividends(c)	\$b	14.8	19.2	22.5	16.4	21.1	16.5	21.7	14.6	16.8
ASNA item										
Dividends (excluding imputation credits)	\$b	16.2	18.9	21.4	25.7	27.3	27.5	25.8	29.0	31.2
ATO statistics(d)										
Dividends (including imputation credits)	\$b	17.0	19.8	22.6	27.8	29.2	29.7	27.1	29.5	nya
Equals: Dividends	\$b	12.1	14.1	16.0	19.7	20.7	21.0	19.3	21.0	nya
Plus: Imputation credits	\$b	4.9	5.8	6.6	8.1	8.5	8.7	7.9	8.6	nya
SIH as a percent of ASNA	%	91.3	101.9	104.9	63.6	77.4	60.0	84.3	50.4	53.8

(d) Source: ATO, 2013

In the SIH, net profit or loss from investment properties is collected from respondents and the value of housing services accruing to owner-occupiers is imputed for the primary residence. Both estimates exclude all costs that would be borne by a landlord. The SIH estimates for residential property income will also be reported net of depreciation for some investment properties.

To align with the SIH measurement of income from residential property, interest payable, water and sewerage costs and part of house insurance premiums have been deducted from the ASNA estimate of GOS, as shown in Table A15. However, no estimate of depreciation has been deducted from the ASNA estimates.

A15 INCOME FROM RESIDENTIAL PROPERTY

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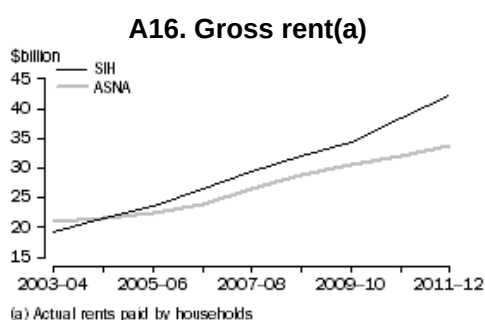
Net imputed rent from owner-occupied dwellings(b)	\$b	23.8	24.5	25.1	27.4	29.6	35.2	40.7	40.5	40.3
Profit or loss from residential property	\$b	0.3	-1.3	-1.3	-1.3	-1.1	-2.9	-2.0	-3.6	-2.9
Income from residential property	\$b	24.1	23.2	23.8	26.0	28.5	32.3	38.7	37.0	37.4
ASNA items										
Income from residential property	\$b	20.7	16.3	14.5	9.8	7.4	18.0	23.4	16.2	18.6
Equals: Gross operating surplus - dwellings owned by persons	\$b	54.6	56.3	59.2	65.2	75.9	83.9	91.2	97.2	101.7
Less										
Interest payable(c)	\$b	28.3	34.1	38.3	48.5	60.9	57.4	58.5	69.6	71.5
Insurance adjustment to SIH basis	\$b	1.0	1.1	1.5	1.7	1.6	2.1	2.1	3.0	2.3
Water and sewerage costs	\$b	4.6	4.8	4.9	5.3	6.0	6.3	7.2	8.4	9.3
SIH as a percent of ASNA	%	116.4	142.0	164.4	265.4	383.9	179.1	165.5	228.5	201.4

(a) Estimates for 2004-05, 2006-07, 2008-09, and 2010-11 were derived from income data reported for the previous financial year in SIH 2005-06, SIH 2007-08, SIH 2009-10, and SIH 2011-12, respectively

(b) Net imputed rent has not been estimated for 2004-05, 2006-07, 2008-09, and 2010-11. The average of net imputed rent for the year before and after has been used to impute these estimates. For example, the 2004-05 value of \$24 billion is the average of 2003-04 and 2005-06

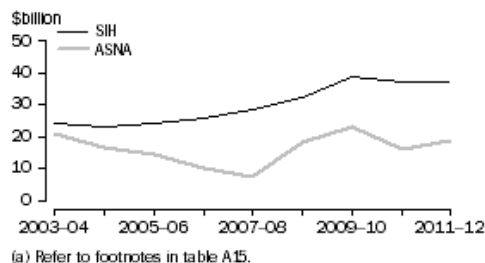
(c) Interest payable excludes financial intermediation services indirectly measured which is deducted as an intermediate consumption expense in gross operating surplus on dwellings

The difference in income from residential property estimates between SIH and ASNA is somewhat explained by a divergence in the estimates of gross rents. The ASNA uses Census data to provide an estimate of rental return and an estimate of stock of rental properties. ASNA uses average rental value of housing and other factors to extrapolate the rental benchmarks forward, the stock of dwellings is updated using ABS building completions data and an estimate for demolitions and other stock changes. As shown in Graph A16, the ASNA estimates of gross rents have been lower than the SIH estimates since 2005-06. Over time, the extrapolation methods used in ASNA rental estimates are likely to have contributed to the divergence from the SIH estimates of housing rental. ASNA estimates of rental income are due to be revised later this year with the introduction of new benchmarks incorporating information from the 2011 Census.



The lower rent estimate in ASNA than in SIH in recent years is also partly explained by differences in the reporting of interest. In the ASNA, housing mortgage interest information is supplied by loan providers. Business loans where the house has been used as collateral should not be included, but it is thought that some lenders report total mortgage interest. In the SIH, respondents are asked to report the purpose of their loan and only interest on loans used for the purchase of the dwelling has been deducted. In recent years many households have used the equity in their residential properties to purchase shares and fund consumption expenditure, particularly during the economic boom period prior to the global financial crisis (GFC) in late 2008. The rapid rise in interest rates prior to the GFC and the subsequent sharp fall in rates in the immediate aftermath are reflected in the ASNA estimates. Graph A17 illustrates the impact of rising interest rates between 2006 and 2008 on the ASNA estimate of income from residential property.

A17. Income from residential property(a)



Social transfers in kind

Social transfers in kind have been modelled for the first time in the 2011-12 SIH, however STIK estimates are available in the years that the fiscal incidence studies were conducted (2003-04 and 2009-10). In 2011-12, SIH STIK was higher than the ASNA estimate of STIK., despite scope exclusions in the SIH. However, SIH estimates include amounts from health, social security and welfare administration and services that are excluded from the ASNA estimate of STIK.

A18 SOCIAL TRANSFERS IN KIND

		2003-04	2009-10	2011-12
SIH item				
Total social transfers in kind(a)	\$b	96.1	156.3	184.1
ASNA item				
Total social transfers in kind(b)	\$b	95.8	150.5	166.1
Equals: Social transfers in kind	\$b	92.0	144.0	157.9
Plus: Social assistance benefits treated as STIK in SIH(c)	\$b	3.8	6.5	8.2
SIH as a percent of ASNA	%	100.3	103.9	110.9

(a) Includes some expenditure not classified as STIK in ASNA

(b) Includes some social transfers that are not in scope of private households in the SIH

(c) Includes the Private Health Insurance Rebate and Child Care Benefit

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Further information

A corresponding data confrontation for wealth is presented separately in an appendix in Household Wealth and Wealth Distribution, 2011-12 (cat. no. 6554.0).